



2023 Groundwater Monitoring Report Town and Country Dry Cleaners Site (828149) Brighton, New York

Work Assignment No. D009806-34

Prepared for

New York State Department of Environmental Conservation
Division of Environmental Remediation
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LIST OF ACRONYMS AND ABBREVIATIONS

µg/L	Microgram(s) per liter
AWQS	Ambient Water Quality Standards
<i>cis</i> -1,2-DCE	<i>cis</i> -1,2-dichloroethene
EA	EA Engineering, P.C. and its affiliate EA Science and Technology
EPA	U.S. Environmental Protection Agency
ft	Foot (feet)
MACTEC	MACTEC Engineering and Consulting, P.C.
ng/L	Nanogram(s) per liter
No.	Number
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
PCE	Tetrachloroethene
PFAS	Per- and polyfluoroalkyl substances
PFOS	Perfluorooctanesulfonic acid
PFOA	Perfluorooctanoic acid
SCOs	Soil Cleanup Objectives
Site	Town and Country Dry Cleaners Site
TCE	Trichloroethene
VOC	Volatile organic compound

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1. BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C. and its affiliate EA Science and Technology (EA) under Work Assignment Number (No.) D009806-34 to perform site management activities, including annual groundwater sampling, at the Town and Country Dry Cleaners Site (NYSDEC Site No. 828149). The Site is located at 2308 and 2310 Monroe Avenue, in the Town of Brighton, Monroe County, New York (**Figures 1 and 2**). The Site has operated as a dry cleaning and laundry facility from 1969 to the present. The primary dry-cleaning solvent, tetrachloroethene (PCE), was used from 1969 to May 2011, when its use was reportedly discontinued. PCE was detected at a concentration of 38,000 milligrams per kilogram in the soil/sediment immediately below the bottom of an unlined catch basin that was previously located to the rear (northeast) of the on-site building. Semivolatile organic compounds were detected in a single shallow soil sample at concentrations above the New York State (NYS) Soil Cleanup Objectives (SCOs) for commercial use (MACTEC Engineering and Consulting, P.C. [MACTEC] 2019).

1.1 SITE DESCRIPTION

The Site is located at 2308 and 2310 Monroe Avenue in the Town of Brighton, Monroe County. The 0.39-acre site is located in a mixed commercial/residential area on the northeast side of the town. Most of the Site is occupied by the on-site building with a paved parking area on the north side. The on-site building is occupied by an inactive dry-cleaning business. The Site is bound by Monroe Avenue to the south, commercial properties to the west and east and a residential neighborhood to the north (NYSDEC 2020).

1.2 PROJECT BACKGROUND

During Fall 2015, an Interim Remedial Measure (shown on **Figure 2**) was conducted to remove the soil containing the greatest concentrations of volatile organic compounds (VOCs) immediately below and surrounding the catch basin, and to replace the unlined catch basin with a new sealed, concrete-lined catch basin (MACTEC 2016a). Prior to backfilling the excavation, the bottom and sides were sprayed with sodium permanganate to oxidize remaining soil contamination immediately surrounding the excavation.

A Feasibility Study (MACTEC 2016b) was completed for the Site, and the NYSDCE issued a Record of Decision for the Site remediation in March 2017 (NYSDEC 2017). The selected remedy consists of the following:

- Excavation and off-site disposal of all on-site soils which exceed the NYS SCOs for commercial use.
- Excavation and off-site disposal of all off-site soil which exceed NYS SCOs for residential use.

- In Situ Enhanced Biodegradation to treat PCE and its associated degradation products in groundwater in an area to be determined during the remedial design.

In 2017, a Pre-Design Investigation was completed for the Site. Soil sample results further delineated the extent of PCE contamination exceeding Residential SCOs for the off-site property and Commercial SCOs on the Site. The sample results were used during the remedial design to calculate volume estimates for excavation and off-site disposal. Groundwater sample results indicate contaminant concentrations and extent are consistent with previous investigations and display limited potential for reductive de-chlorination of PCE (MACTEC 2018).

In 2019, a round of groundwater samples were collected to assess groundwater concentrations post soil removal Interim Remedial Measure (MACTEC 2019).

In 2021, NYSDEC performed a soil removal action according to the Record of Decision (NYSDEC 2017) to remove remaining on-site soil with concentrations of contaminants (primarily PCE) greater than commercial use SCOs and to remove soil at the adjacent residential property to the south with concentrations of contaminants greater than the residential SCOs. The soil remedial action removed the largest source of groundwater contamination, as well as the areas with the greatest identified groundwater concentrations (PCE was detected at 63,000 micrograms per liter [$\mu\text{g/L}$] in 2019 within the limits of excavation). This soil removal action generally met the objectives, although some contamination exceeding SCOs for commercial use remain at depth on the north edge of the property where further excavation was not possible or practical because of excavation sloping requirements (MACTEC 2023a).

2. FIELD INVESTIGATION

Field activities included monitoring well assessments/inspections, groundwater gauging, and sampling of the existing monitoring well network (**Table 1**). Field forms from the inspection and sample collection events are provided in **Appendix A**. Groundwater monitoring was conducted according to the Site Management Plan (MACTEC 2023b).

2.1 MONITORING WELL ASSESMENTS

During the sampling event on 6 June 2023, EA located 19 of the 25 on-site and off-site wells, 5 of which could not be sampled. Monitoring wells MW-02B, DP-10, DP-11, DP-12, DP-14 and GEMW-1 were not found. Five monitoring wells (MW-8, MW-10, DP-16, DP-16B, and MW-1) were unable to be sampled for various reasons. Monitoring wells MW-8 and MW-10 were dry. The condition of DP-16 and MW-16B indicated that the wells were abandoned and sealed. In addition, MW-1 contained asphalt inside the well casing, a broken J-plug, and the polyvinyl chloride piping open to the asphalt. A completed site inspection form can be found in **Appendix B**.

2.2 GROUNDWATER GAUGING

Groundwater sampling during this event included per-and polyfluoroalkyl substances (PFAS) sampling at all wells; therefore, a site-wide gauging event was performed at the end of the sampling event to prevent PFAS contamination prior to sampling. All wells returned to static condition after sampling was complete and prior to the site-wide gauging event. Based on the June 2023 gauging data, the groundwater at the site flows in an east-southeast direction. An overburden groundwater elevation contour is shown on **Figure 3**. A bedrock groundwater elevation contour is shown on **Figure 4**.

2.3 GROUNDWATER SAMPLING

In June 2023, groundwater sampling was conducted for 14 of the 25 monitoring wells, as discussed in Section 2.1. Fourteen wells (i.e., 8 on-site and 6 off-site) were sampled using a peristaltic pump and the low flow sampling procedure. On 5 June 2023, DP-15 and GEMW-2 were purged dry, to allow the wells to recharge, and samples were collected the following day, once water levels returned to static conditions. On 6 June 2023, DP-20 was purged and sampled next to an active sewer/water main excavation and repair site. While EA was adjacent to the construction site, the contractors did not operate machinery and only used hand tools throughout the duration of the sampling. The excavation was present approximately 4 feet (ft) away from the well and was open to about 20 ft below grade. Purging of MW-08 and MW-10 was attempted but with less than 0.1 ft of water in the wells, they were deemed dry, and samples were unable to be collected. The remaining wells in the network were sampled over the course of the 2-day event.

2.4 LABORATORY ANALYSIS

Samples were submitted to NYSDEC call-out contract laboratory Con-Test (a Pace Analytical Laboratory) for analysis of VOCs via U.S. Environmental Protection Agency (EPA) Method

8260D, PFAS via EPA Method 1633, and 1,4-dioxane via EPA Method 8270 SIM. All analytical data were then submitted to Environmental Data Services, LTD, for data validation. The Category B laboratory report and data validation report are included in **Appendix C**.

3. GROUNDWATER SAMPLING RESULTS

Results from the June 2023 sampling effort are discussed separately for each of the contaminants analyzed for and presented in **Tables 2 and 5**. Groundwater contours for overburden and bedrock wells are provided on **Figures 3 and 4**. Contaminant concentration for PCE and trichloroethene (TCE) in the overburden and bedrock aquifers are provided on **Figures 7 through 10**.

3.1 VOLATILE ORGANIC COMPOUND RESULTS

The laboratory analysis indicated that PCE was detected in 8 overburden wells and 3 bedrock wells. Six overburden wells and 1 bedrock well had concentrations exceeding NYS Ambient Water Quality Standards (AWQS) of 5 µg/L. Concentrations ranged from 1.0 to 9.2 µg/L in bedrock and from 1.6 to 3,200 µg/L in overburden wells. The 3 wells with the greatest concentrations of PCE were DP-15, MW-3, and MW-13, with concentrations of 1,200 µg/L, 2,000 µg/L, and 3,200 µg/L, respectively. Monitoring wells DP-015, MW-3, and MW-13 are all located in the overburden aquifer.

TCE concentrations were detected in seven overburden wells and two bedrock wells. Concentrations ranged from 0.9 to 160 µg/L in the overburden and 1.9 to 7.7 µg/L in the bedrock. Results from 5 overburden monitoring wells and 1 bedrock well exceed AWQS of 5 µg/L. The overburden wells containing TCE concentrations above AWQS include DP-15, DP-19, MW-02, MW-03, and MW-13; and the bedrock well that showed exceedance was MW-21B. The extent of TCE in groundwater is presented in **Figure 6**.

Cis-1,2-dichloroethylene (*cis*-1,2-DCE) was detected in seven overburden wells and two bedrock wells. Concentrations ranged from 0.27 to 330 µg/L in the overburden and 7 to 12 µg/L in the bedrock. Results from 5 overburden and 2 bedrock monitoring wells exceed AWQS of 5 µg/L. The overburden wells containing *cis*-1,2-DCE concentrations above AWQS include DP-15, DP-19, MW-02, MW-03, MW-13, and the bedrock wells that showed exceedances were MW-13B and MW-21B.

Vinyl chloride was only detected in DP-19, an overburden well, and MW-21B, a bedrock well. Both detections were below the AWQS value of 2 µg/L. A summary of sampling results can be found in **Table 2** and on **Figure 4**. Historical analytical results for VOC concentrations are presented in **Tables 3 and 4**.

3.2 EMERGING CONTAMINANTS RESULTS

The groundwater samples were analyzed for PFAS via EPA Method 1633 and 1,4-dioxane via EPA Method 8270 SIM. Results show that perfluorooctanesulfonic acid (PFOS) was detected in four overburden monitoring wells, and perfluorooctanoic acid (PFOA) was detected in seven overburden monitoring wells and two bedrock monitoring wells. PFOS concentrations exceeded the AWQS of 2.7 nanograms per liter (ng/L) in 2 monitoring wells, DP-20 and MW-13, both in the overburden aquifer. DP-20 and MW-13 had PFOS concentrations of 3.6 and 12 ng/L, respectively. PFOA concentrations exceeded the AWQS of 6.7 ng/L in MW-13 with a concentration of 10 ng/L. No exceedances in PFOS or PFOA were found in the bedrock aquifer.

Analytical results from the 2023 sampling effort are presented in **Table 5** and on **Figure 5**. The 2023 analytical results are presented in **Appendix C**. Historical analytical results for emerging contaminants are presented in **Table 6**.

3.3 TREND EVALUATION

The Mann-Kendall test was used to statistically evaluate trends for PCE, TCE, and *cis*-1,2-DCE concentrations over time in 14 representative wells. The Mann-Kendall Test is a non-parametric test that can be used to define the stability of a solute plume (i.e., stable, diminishing, or expanding) based on concentration trends at individual wells. To evaluate plume stability, four or more independent sampling events are required.

The following steps comprise the Mann-Kendall Test:

- **Step 1—Well Data:** Contaminant concentrations are entered for each sampling event. Only those events for which numeric or non-detect values are available are included. In the event of a non-detect value, one-half the laboratory reporting limit was used for previous sampling events.
- **Step 2—Data Comparisons:** Compare data sequentially, comparing sample event 1 to sample events 2 through n, then sampling event 2 to sampling events 3 through n, etc. Each row is filled with a 1, 0, or -1 as follows:
 - Concentration of Event x_i > Event 1: Enter +1
 - Concentration of Event x_i = Event 1: Enter 0
 - Concentration of Event x_i < Event 1: Enter -1

Where: n = total number of sampling events

x_i = value of given sample event, with $i = 2$ to n

All rows are completed in the same manner until all sampling events are included.

- **Step 3—Mann-Kendall Statistic:** Each row is then summed (e.g., $0+0+-1+-1+0 = -2$) and the sum is recorded in the far right-hand column. The right-hand column is then summed to get the total sum. This total value represents the Mann-Kendall Statistic “S” for the data from an individual well.
- **Step 4—Determine Probability p:** A probability table in EPA (1998) was used to determine the probability p.
- **Step 5—Hypothesis Testing:** The null hypothesis (no trend) was tested against the alternative hypotheses; H1 (upward trend) and H2 (downward trend). A 95 percent confidence interval was used for hypothesis testing.

A Mann-Kendall trend analysis was performed for overburden and bedrock monitoring wells with data from the 5 most recent sampling events from July 2013 to June 2023. Contaminant concentrations were analyzed for representative wells screened in both aquifers. The following wells were selected because they have data available from the greatest number of sampling events:

- Overburden Wells – DP-15, DP-17, DP-18, DP-19, DP-20, DP-21, GEMW-02, MW-02, MW-03, and MW-13.
- Bedrock Wells – MW-13B, MW-17B, MW-19B, and MW-21B.

Over the 10-year span, the trend analysis indicated that most wells are either stable or decreasing in concentrations of PCE, TCE, and *cis*-1,2-DCE. One bedrock well indicated an increasing trend for TCE and *cis*-1,2-DCE. One overburden well has a probably increasing trend for TCE. Several wells showed no trend for any of the analytes. Results of the Mann-Kendall Analyses are presented in **Appendix D** and are summarized in the following sections. The Mann-Kendall Analysis utilized historical data that is presented in **Tables 3, 4, and 6**.

3.3.1 PCE Concentration Trends

In the overburden aquifer, PCE concentrations are decreasing in DP-15, GEMW-02, MW-02, and MW-13 and stable in DP-18, DP-21, and MW-03. Other select wells do not show a concentration trend.

In the bedrock aquifer, PCE concentration trends are stable in MW-13B and MW-17B. The other select wells do not show a concentrations trend.

3.3.2 TCE Concentration Trends

In the overburden aquifer, TCE concentrations are decreasing in DP-15, MW-02, MW-03, and MW-13 and stable in DP-17, DP-18, DP-20, DP-21 and GEMW-02. TCE concentration is probably increasing in DP-19.

TCE concentration in the bedrock aquifer showed no trend in MW-21B, an increasing trend found in MW-13B, and a stable trend in MW-17B and MW-19B.

3.3.3 *Cis*-1,2-DCE Concentration Trends

In the overburden aquifer, *cis*-1,2-DCE concentrations are decreasing in GEMW-02 and MW-03; probably decreasing in MW-02; and stable in DP-15, DP-17, DP-18, DP-20, DP-21, and MW-13. No trend was shown in DP-19.

Concentration trends for *cis*-1,2-DCE show a stable trend in MW-17B and MW-19B and increasing trend in MW-13B. No trend was identified in MW-21B.

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4. CONCLUSIONS AND RECOMMENDATIONS

Over the course of the groundwater monitoring program from the last 10 years, the trend analysis indicated that most wells are either stable or slowly decreasing in concentrations of PCE, TCE, and *cis*-1,2-DCE. However, on-site monitoring well MW-13B showed an increasing trend for TCE and *cis*-1,2-DCE, and DP-19 may have an increasing trend for TCE. Based on the recent groundwater sampling of June 2023, VOC concentrations are still above AWQS even after the implementation of the soil excavation in the source area. Most VOC exceedances and the highest concentrations appear to be in the overburden aquifer unit.

Many of the monitoring wells associated with the Site have been likely destroyed during the previous remedial action. The plume is not well defined downgradient from the source with the furthest sentinel clusters DP-19/MW-19B and DP-21/MW-21B showing detectable and AWQS exceedance contaminant of concern values. Five sampling events have occurred over the course of the last 10 years and have been inconsistent in frequency.

EA recommends the installation of several new monitoring wells to define the existing plume. The recommended well locations will be provided in a forthcoming workplan. These wells would supplement the current well network in both the overburden and bedrock units.

It is also recommended that the site monitoring program frequency increase to bi-annual sampling (2Q and 4Q) for the next 2 years (2023 and 2024 calendar years), with the next event set to occur in December 2023. This will allow for a more robust and conclusive data set to verify that the remedy was successful. If VOC concentrations continue to increase in key monitoring wells, further recommendations will be made to help manage the plume.

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5. REFERENCES

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Tables

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Table 1. Monitoring Well Details and Gauging Data

Location ID	Targeted Unit	Northing	Easting	Ground Elevation (ft amsl)	TOC Elevation (ft amsl)	Screen Length (ft)	DTW ¹ (ft btoc)	Groundwater Elevation (ft amsl)	DTB (ft btoc)	DTB (ft amsl)	Top of Screen (ft amsl)
DP-10	Overbuden	1138737.73	1422305.44	477.84	477.53	6.0	--	--	--	--	--
DP-11	Overbuden	1138734.19	1422359.91	478.37	478.05	8.0	--	--	--	--	--
DP-12	Overbuden	1138700.85	1422352.85	477.42	477.09	10.0	--	--	--	--	--
DP-14	Overbuden	1138717.51	1422261.09	477.14	476.82	5.0	--	--	--	--	--
DP-15	Overbuden	1138744.94	1422284.51	477.25	476.98	5.0	4.50	472.48	9.42	469.35	474.4
DP-16	Overbuden	1138766.08	1422168.18	479.06	478.77	5.0	--	--	--	--	--
DP-17	Overbuden	1138699.91	1422092.66	479.89	479.50	10.0	7.50	472.00	16.29	463.21	469.2
DP-18	Overbuden	1138578.39	1422161.46	478.82	478.29	6.0	6.88	471.41	10.27	468.02	478.0
DP-19	Overbuden	1138532.70	1422378.17	475.49	475.15	10.0	5.56	469.59	12.91	462.24	472.2
DP-20	Overbuden	1138477.85	1422664.27	474.21	473.80	10.0	11.97	461.83	14.78	459.02	467.0
DP-21	Overbuden	1138650.76	1422923.25	468.74	468.38	8.0	7.96	460.42	10.37	458.01	463.0
GEMW-1	Overbuden	1138768.73	1422148.96	479.70	479.57	5.0	--	--	--	--	--
GEMW-2	Overbuden	1138751.76	1422130.52	480.36	480.25	5.0	7.20	473.05	14.31	465.94	470.9
MW-1	Overbuden	1138762.61	1422240.53	477.40	477.05	5.0	4.03	473.02	11.00	466.05	471.1
MW-2	Overbuden	1138726.34	1422216.42	477.13	476.87	5.0	5.00	471.87	22.49	454.38	459.4
MW-2B	Bedrock	1138727.39	1422222.76	477.06	476.71	5.0	--	--	--	--	--
MW-3	Overbuden	1138741.96	1422179.86	478.37	478.00	5.0	4.10	473.90	7.63	470.37	475.4
MW-8	Overbuden	1138868.41	1422501.18	473.10	473.04	5.0	--	--	--	--	--
MW-10	Overbuden	1138876.06	1422009.43	482.11	481.70	5.0	--	--	--	--	--
MW-13	Overbuden	1138720.92	1422285.49	477.39	480.36	5.0	8.07	472.29	12.90	467.46	472.5
MW-13B	Bedrock	1138716.73	1422294.21	477.80	480.37	5.0	9.26	471.11	25.02	455.35	460.4
MW-16B	Bedrock	1138763.12	1422164.89	478.95	478.58	5.0	--	--	--	--	--
MW-17B	Bedrock	1138696.71	1422088.47	479.75	479.35	5.0	7.43	471.92	27.20	452.15	457.2
MW-19B	Bedrock	1138531.53	1422373.04	475.69	475.35	5.0	5.63	469.72	21.00	454.35	459.4
MW-21B	Bedrock	1138654.47	1422923.58	468.55	468.15	5.0	8.31	459.84	19.48	448.67	448.7

Notes:

1. DTW was measured on 16 June 2023.

-- = Well not measured during monitoring event

amsl = Above mean sea level

btoc = Below top of casing

DTB = Depth to bottom

DTW = Depth to water

ft = Foot (feet)

ID = Identification

TOC = Top of casing

Horizontal Coordinates reference to the New York State Plane Coordinate System, West Zone (3103) based on NAD 83 (2011).

Vertical Datum is NAVD88. Survey conducted by Prudent Engineering, dated 8/12/2013.

Table 2. Groundwater Sample Analytical Results- VOCs

Analyte	NYSDEC SCG ¹	Well ID	DP-015	DP-017	DP-018	DP-019	DP-020	DP-021	GEMW-02	MW-02	MW-03	MW-13	MW-13B	MW-17B	MW-19B	MW-21B	
		Well Depth	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Bedrock	Bedrock	Bedrock	Bedrock
		Sample Date	6/6/2023	6/5/2023	6/6/2023	6/6/2023	6/6/2023	6/6/2023	6/6/2023	6/6/2023	6/5/2023	6/6/2023	6/5/2023	6/5/2023	6/5/2023	6/6/2023	6/6/2023
		Unit	EPA Method 8260D														
Acetone	50	µg/L	ND	ND	4.0 J	ND	2.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloroform	7	µg/L	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND	ND	0.63 J	ND	
2-Butanone	50	µg/L	63 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethylene (PCE)	5	µg/L	1200	ND	1.7	41	ND	1.6	67	70	2000	3200	1	ND	4.3	9.2	
Trichloroethylene (TCE)	5	µg/L	36	ND	0.90 J	10	ND	ND	1.1	18	160	120	1.9	ND	ND	7.7	
Vinyl Chloride	2	µg/L	ND	ND	ND	0.29 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71 J	
Cis -1,2,-Dichloroethylene	5	µg/L	88	ND	0.58 J	9.4	ND	ND	0.27 J	22	330	170	7	ND	ND	12	
Trans -1,2- Dichloroethene	5	µg/L	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

J = Estimated value due to either being a Tentatively Identified Compound or that the concentration is between the Method Reporting Limit and the Method Detection Limit. Concentrations are not verified within the linear range of the calibration.

ND = Not detected

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

SCG = Standards, Criteria, and Guidance

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compound

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC SCGs

Table 3. Historical Bedrock VOC Analytical Results							
Location ID Sample Name Parent Sample ID Sample Date			MW-2B				
			828149-MW2B20	828149-MW2B20D	828149-MW02B020	828149-MW02B020	828149-MW02B020
			7/24/2013	828149-MW2B20	4/26/2016	10/12/2017	5/7/2019
			7/24/2013	7/24/2013	4/26/2016	10/12/2017	5/7/2019
Analyte	NYSDEC AWQS ¹	Unit	Method SW8260				
Acetone	50	µg/L	< 10 U	< 10 UJ	< 5 U	< 5.0 U	< 5 U
Carbon Disulfide	60	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U
Chloroform	7	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U
Cis -1,2-Dichloroethylene	5	µg/L	3.4	3	3.9	4.9	7.4
Tetrachloroethylene (PCE)	5	µg/L	16	16	12	8.5	20
Trichloroethylene (TCE)	5	µg/L	3.2	3	3.5	3.5	6
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
U = Analyte not detected.
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
VOC = Volatile organic compounds
Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 3. Historical Bedrock VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			MW-13B					MW-16B			
			828149-MW13B20	828149-MW013B023	828149-MW013B023	828149-MW013B023	828149-MW-13B	828149-MW16B17	828149-MW016B023	828149-MW016B023	828149-MW16B023
			7/24/2013	4/28/2016	10/11/2017	5/7/2019	6/5/2023	7/22/2013	4/27/2016	10/10/2017	5/6/2019
			Method SW8260								
Analyte	NYSDEC AWQS ¹	Unit									
Acetone	50	µg/L	< 10 U	< 5 U	< 5.0 U	< 5 U	< 50 U	< 10 U	< 5 U	< 5.0 U	< 5 U
Carbon Disulfide	60	µg/L	0.34 J	< 1 U	< 1.0 U	4.1	< 5 U	< 1 U	< 1 U	< 1.0 U	< 1 U
Chloroform	7	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1.0 U	< 1 U
Cis -1,2-Dichloroethylene	5	µg/L	0.51 J	0.93 J	2	2	7	0.45 J	0.75 J	0.42 J	0.95 J
Tetrachloroethylene (PCE)	5	µg/L	0.65 J	3.6	3.3	1.6	1	0.43 J	0.63 J	0.39 J	0.95 J
Trichloroethylene (TCE)	5	µg/L	0.38 J	0.73 J	1.3	1.2	1.9	< 1 U	0.38 J	< 1.0 U	0.45 J
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1.0 U	< 1 U

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
U = Analyte not detected.
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
VOC = Volatile organic compounds
Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 3. Historical Bedrock VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			MW-17B					MW-19B				
			828149-MW17B25	828149-MW017B0180	828149-MW017B018	828149-MW017B0180	828149-MW-17B	828149-MW19B17	828149-MW019B025	828149-MW019B025	828149-MW019B025	828149-MW-19B
			7/23/2013	4/26/2016	10/11/2017	5/8/2019	6/5/2023	7/23/2013	4/27/2016	10/11/2017	5/8/2019	6/6/2023
Analyte	NYSDEC AWQS ¹	Unit	Method SW8260									
Acetone	50	µg/L	< 10 U	< 5 U	< 5.0 U	< 5 U	< 50 U	< 10 U	< 5 U	< 5.0 U	< 5 UJ	< 50 U
Carbon Disulfide	60	µg/L	< 1 U	< 1 U	< 1.0 U	4.5	< 5 U	< 1 U	< 1 UJ	< 1.0 U	< 1 UJ	< 5 U
Chloroform	7	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	0.63 J
Cis -1,2-Dichloroethylene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	7.7	9.8	12	9.4 J	< 1 U
Tetrachloroethylene (PCE)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	4.2	10	13	13 J	4.3
Trichloroethylene (TCE)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	4.4	6.2	8.4	6.9 J	< 1 U
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 2 U

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
U = Analyte not detected.
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
VOC = Volatile organic compounds
Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 3. Historical Bedrock VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			MW-21B				
			828149-MW21B17	828149-MW021B019	828149-MW021B019	828149-MW021B019	828149-MW-21B
			7/23/2013	4/27/2016	10/11/2017	5/8/2019	6/6/2023
			Method SW8260				
Analyte	NYSDEC AWQS ¹	Unit					
Acetone	50	µg/L	< 10 U	< 5 U	2.2 J	< 5 U	< 50 U
Carbon Disulfide	60	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 5 U
Chloroform	7	µg/L	0.74 J	1.5	3.4	< 1 U	< 2 U
Cis -1,2-Dichloroethylene	5	µg/L	< 1 U	< 1 U	< 1.0 U	0.38 J	12
Tetrachloroethylene (PCE)	5	µg/L	6	5.7	8.3	6	9.2
Trichloroethylene (TCE)	5	µg/L	0.62 J	0.5 J	0.73 J	0.59 J	7.7
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	0.71 J

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
U = Analyte not detected.
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
VOC = Volatile organic compounds
Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			DP-010					DP-011
			828149-GW010019	828149-DP1007	828149-DP010008	828149-DP010008	828149-DP010008	828149-DP011012
			5/22/2013	7/24/2013	4/26/2016	10/11/2017	5/8/2019	5/8/2019
			Method SW8260					
Analyte	NYSDEC AWQS ¹	Unit						
1,1,1-Trichloroethane (TCA)	5	µg/L	< 1 U	1.5 J	0.5 J	1.8 J	< 1 U	< 1 U
1,1-Dichloroethane	5	µg/L	< 1 U	0.46 J	0.22 J	1.2 J	< 1 U	< 1 U
1,1-Dichloroethene	5	µg/L	< 1 U	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	NA	< 40 UJ	< 200 U	< 40 U	< 40 U
Acetone	50	µg/L	4.1 J	< 20 U	1.4 J	9.4 J	< 5 U	< 5 U
Benzene	1	µg/L	0.28 J	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U
Bromodichloromethane	50	µg/L	< 1 U	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U
Bromomethane	5	µg/L	< 2 UJ	< 4 U	< 1 U	< 5.0 U	< 1 U	< 1 U
Carbon Disulfide	60	µg/L	< 1 U	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U
Chloroethane	5	µg/L	< 2 U	< 4 U	< 1 U	< 5.0 U	< 1 U	< 1 U
Chloroform	7	µg/L	< 1 U	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U
Chloromethane	NSL	µg/L	< 2 U	< 4 U	< 1 U	< 5.0 U	< 1 U	< 1 U
<i>Cis</i> -1,2-Dichloroethylene	5	µg/L	3.1	110	29	100	55	< 1 U
Cyclohexane	NSL	µg/L	0.47 J	< 4 U	< 1 U	< 5.0 U	< 1 U	< 1 U
Ethylbenzene	5	µg/L	< 1 U	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U
m,p-Xylene	NSL	µg/L	0.63 J	< 4 U	< 2 U	< 10 U	< 2 U	< 2 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 5 U	< 10 U	< 5 U	< 25 U	< 5 U	< 5 U
Methylcyclohexane	NSL	µg/L	0.79 J	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 1 U	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U
Tetrachloroethylene (PCE)	5	µg/L	0.41 J	1500	530	5300	120	0.96 J
Toluene	5	µg/L	0.6 J	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U
<i>Trans</i> -1,2-Dichloroethene	5	µg/L	< 1 U	1.3 J	1	< 5.0 U	0.45 J	< 1 U
Trichloroethylene (TCE)	5	µg/L	1	170	130	140	38	< 1 U
Vinyl Chloride	2	µg/L	0.38 J	< 2 U	< 1 U	< 5.0 U	< 1 U	< 1 U

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

U = Analyte not detected.

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			DP-012				DP-014			
			828149-DP1217	828149-DP012015	828149-DP012015	828149-DP012015	828149-DP1407	828149-DP014009	828149-DP014009	828149-DP014009
			7/24/2013	4/26/2016	10/10/2017	5/8/2019	7/24/2013	4/26/2016	10/11/2017	5/7/2019
			Method SW8260							
Analyte	NYSDEC AWQS ¹	Unit								
1,1,1-Trichloroethane (TCA)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
1,1-Dichloroethane	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
1,1-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	< 40 UJ	< 40 U	< 40 UJ	NA	< 2000 UJ	< 2000 U	< 2000 U
Acetone	50	µg/L	< 10 U	5.2	< 5.0 U	< 5 UJ	< 500 U	< 250 U	< 250 U	< 250 U
Benzene	1	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
Bromodichloromethane	50	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
Bromomethane	5	µg/L	< 2 UJ	< 1 U	< 1.0 U	< 1 UJ	< 100 UJ	< 50 U	< 50 U	< 50 U
Carbon Disulfide	60	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
Chloroethane	5	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 UJ	< 100 U	< 50 U	< 50 U	< 50 U
Chloroform	7	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
Chloromethane	NSL	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 UJ	< 100 U	< 50 U	< 50 U	< 50 U
<i>Cis</i> -1,2-Dichloroethylene	5	µg/L	0.64 J	0.46 J	1.7	0.54 J	870	450	550	340
Cyclohexane	NSL	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 UJ	< 100 U	< 50 U	< 50 U	< 50 U
Ethylbenzene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
m,p-Xylene	NSL	µg/L	< 2 U	< 2 U	< 2.0 U	< 2 UJ	< 100 U	< 100 U	< 100 U	< 100 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 5 U	< 5 U	< 5.0 U	< 5 UJ	< 250 U	< 250 U	< 250 U	< 250 U
Methylcyclohexane	NSL	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
Tetrachloroethylene (PCE)	5	µg/L	0.81 J	< 1 U	< 1.0 U	0.59 J	13000	9400	12000	8100
Toluene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
<i>Trans</i> -1,2-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U
Trichloroethylene (TCE)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	500	360	420	310
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 50 U	< 50 U	< 50 U	< 50 U

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

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NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			DP-015					DP-016			
			828149-DP1507	828149-DP015009	828149-DP015009	828149-DP015009	828149-DP-15	828149-DP1607	828149-DP016009	828149-DP016009	828149-DP016009
			7/24/2013	4/27/2016	10/11/2017	5/8/2019	6/6/2023	7/23/2013	4/27/2016	10/11/2017	5/8/2019
			Method SW8260								
Analyte	NYSDEC AWQS ¹	Unit									
1,1,1-Trichloroethane (TCA)	5	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 20 U	< 1 U	< 1 U	< 1.0 U	< 2 U
1,1-Dichloroethane	5	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 20 U	0.35 J	< 1 U	0.35 J	0.44 J
1,1-Dichloroethene	5	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 20 U	3.7	1.1	2.1	3.8
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	< 800 UJ	< 2000 U	< 200 U	< 0.21 U	NA	< 40 UJ	< 40 U	< 80 U
Acetone	50	µg/L	< 250 U	< 100 U	< 250 U	< 25 U	< 1000 U	< 10 U	< 5 U	1.8 J	< 10 U
Benzene	1	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 20 U	< 1 U	< 1 U	< 1.0 U	< 2 U
Bromodichloromethane	50	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 10 U	< 1 U	< 1 U	< 1.0 U	< 2 U
Bromomethane	5	µg/L	< 50 UJ	< 20 U	< 50 U	< 5 U	< 40 U	< 2 UJ	< 1 U	< 1.0 U	< 2 U
Carbon Disulfide	60	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 100 U	< 1 U	< 1 U	< 1.0 U	< 2 U
Chloroethane	5	µg/L	< 50 U	< 20 U	< 50 U	< 5 U	< 40 U	< 2 U	< 1 U	0.59 J	< 2 U
Chloroform	7	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 40 U	< 1 U	< 1 U	< 1.0 U	< 2 U
Chloromethane	NSL	µg/L	< 50 U	< 20 U	< 50 U	< 5 U	< 40 U	< 2 U	< 1 U	< 1.0 U	< 2 U
<i>Cis</i> -1,2-Dichloroethylene	5	µg/L	230	190	220	47	88	270	130	300	610
Cyclohexane	NSL	µg/L	< 50 U	< 20 U	< 50 U	< 5 U	NA	< 2 U	< 1 U	< 1.0 U	< 2 U
Ethylbenzene	5	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 20 U	< 1 U	< 1 U	< 1.0 U	< 2 U
m,p-Xylene	NSL	µg/L	< 50 U	< 40 U	< 100 U	< 10 U	< 40 U	< 2 U	< 2 U	< 2.0 U	< 4 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 130 U	< 100 U	< 250 U	< 25 U	63 J	< 5 U	< 5 U	< 5.0 U	< 10 U
Methylcyclohexane	NSL	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 20 U	< 1 U	< 1 U	< 1.0 U	< 2 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 20 U	< 1 U	< 1 U	< 1.0 U	< 2 U
Tetrachloroethylene (PCE)	5	µg/L	8500	5900	6800	1300	1200	96	75	140	300
Toluene	5	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 20 U	< 1 U	< 1 U	< 1.0 U	< 2 U
<i>Trans</i> -1,2-Dichloroethene	5	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 20 U	2.1	3.6	1.8	4
Trichloroethylene (TCE)	5	µg/L	410	210	210	59	36	32	22	38	91
Vinyl Chloride	2	µg/L	< 25 U	< 20 U	< 50 U	< 5 U	< 40 U	120	23	36 J	32

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

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AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

U = Analyte not detected.

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NA = Not analyzed.

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NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			DP-017					DP-018				
			828149-DP1714	828149-DP017015	828149-DP017015	828149-DP017015	828149-DP-17	828149-DP1807	828149-DP018009	828149-DP018009	828149-DP018009	828149-DP-18
			7/23/2013	4/26/2016	10/12/2017	5/8/2019	6/5/2023	7/23/2013	4/27/2016	10/11/2017	5/7/2019	6/6/2023
Analyte	NYSDEC AWQS ¹	Unit	Method SW8260									
1,1,1-Trichloroethane (TCA)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,1-Dichloroethane	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,1-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	< 40 UJ	< 0.40 U	< 40 U	< 0.2 U	NA	< 40 UJ	< 40 U	< 40 U	< 0.21 U
Acetone	50	µg/L	< 10 U	1.4 J	< 5.0 U	< 5 U	< 50 U	3.1 J	< 5 U	1.7 J	< 5 U	4.0 J
Benzene	1	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Bromodichloromethane	50	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 0.5 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 0.5 U
Bromomethane	5	µg/L	< 2 UJ	< 1 U	< 1.0 U	< 1 UJ	< 2 U	< 2 UJ	< 1 U	< 1.0 U	< 1 U	< 2 U
Carbon Disulfide	60	µg/L	< 1 U	< 1 UJ	< 1.0 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 5 U
Chloroethane	5	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 U	< 2 U	< 2 U	< 1 U	< 1.0 U	< 1 U	< 2 U
Chloroform	7	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U
Chloromethane	NSL	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 U	< 2 U	< 2 U	< 1 U	0.23 J	< 1 U	< 2 U
Cis -1,2-Dichloroethylene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	0.78 J	1.5	< 1.0 U	< 1 U	0.58 J
Cyclohexane	NSL	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 U	NA	< 2 U	< 1 U	< 1.0 U	< 1 U	NA
Ethylbenzene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
m,p-Xylene	NSL	µg/L	< 2 U	< 2 U	< 2.0 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.0 U	< 2 U	< 2 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 5 U	< 5 U	< 5.0 U	< 5 U	< 20 U	1.7 J	< 5 U	< 5.0 U	< 5 U	< 20 U
Methylcyclohexane	NSL	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Tetrachloroethylene (PCE)	5	µg/L	0.48 J	< 1 U	< 1.0 U	< 1 U	< 1 U	1.4	3.7	3.1	< 1 U	1.7
Toluene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Trans -1,2-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Trichloroethylene (TCE)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	0.79 J	1.5	< 1.0 U	< 1 U	0.90 J
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U	< 1 U	0.6 J	< 1.0 U	< 1 U	< 2 U

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
U = Analyte not detected.
J = Concentration is estimated.
J+ = Concentration is estimated, biased high.
NA = Not analyzed.
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
VOC = Volatile organic compounds
Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			DP-019					
			828149-GW019014	828149-DP1910	828149-DP019012	828149-DP019012	828149-DP019012	828149-DP-19
			5/23/2013	7/24/2013	4/27/2016	10/11/2017	5/8/2019	6/6/2023
			Method SW8260					
Analyte	NYSDEC AWQS ¹	Unit						
1,1,1-Trichloroethane (TCA)	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 1 U
1,1-Dichloroethane	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 1 U
1,1-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 1 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	NA	< 40 UJ	< 40 U	< 40 UJ	< 0.21 U
Acetone	50	µg/L	< 10 U	< 10 UJ	< 5 U	< 5.0 U	< 5 UJ	< 50 U
Benzene	1	µg/L	0.2 J	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 1 U
Bromodichloromethane	50	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 0.5 U
Bromomethane	5	µg/L	< 2 UJ	< 2 UJ	< 1 U	< 1.0 U	< 1 UJ	< 2 U
Carbon Disulfide	60	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 5 U
Chloroethane	5	µg/L	< 2 U	< 2 U	< 1 U	< 1.0 U	< 1 UJ	< 2 U
Chloroform	7	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 2 U
Chloromethane	NSL	µg/L	< 2 U	< 2 U	< 1 U	< 1.0 U	< 1 UJ	< 2 U
Cis -1,2-Dichloroethylene	5	µg/L	6.5	6.7	7.3	12	7.8 J	9.4
Cyclohexane	NSL	µg/L	0.29 J	< 2 U	< 1 U	< 1.0 U	< 1 UJ	NA
Ethylbenzene	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 1 U
m,p-Xylene	NSL	µg/L	0.34 J	< 2 U	< 2 U	< 2.0 U	< 2 UJ	< 2 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 5 U	< 5 UJ	< 5 U	< 5.0 U	< 5 UJ	< 20 U
Methylcyclohexane	NSL	µg/L	0.48 J	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 1 U
Tetrachloroethylene (PCE)	5	µg/L	17	19	16	28	19 J	41
Toluene	5	µg/L	0.44 J	< 1 U	< 1 U	< 1.0 U	< 1 UJ	< 1 U
Trans -1,2-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	0.21 J	< 1 U
Trichloroethylene (TCE)	5	µg/L	4.4	4.9	4.9	8.5	5.5 J	10
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 UJ	0.29 J

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

U = Analyte not detected.

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			DP-020						
			828149-GW020015	828149-GW020019	828149-DP2012	828149-DP020012	828149-DP020012	828149-DP020012	828149-DP-20
			5/23/2013	5/23/2013	7/23/2013	4/27/2016	10/11/2017	5/8/2019	6/6/2023
			Method SW8260						
Analyte	NYSDEC AWQS ¹	Unit							
1,1,1-Trichloroethane (TCA)	5	µg/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,1-Dichloroethane	5	µg/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,1-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	NA	NA	< 40 UJ	< 40 U	< 40 U	< 0.21 U
Acetone	50	µg/L	8.9 J	< 10 U	< 10 UJ	5.7	4.2 J	< 5 U	2.7 J
Benzene	1	µg/L	1.8	0.49 J	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Bromodichloromethane	50	µg/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 0.5 U
Bromomethane	5	µg/L	< 2 UJ	< 2 UJ	< 2 UJ	< 1 U	< 1.0 U	< 1 U	< 2 U
Carbon Disulfide	60	µg/L	0.41 J	0.27 J	< 1 U	< 1 U	< 1.0 U	< 1 U	< 5 U
Chloroethane	5	µg/L	< 2 U	< 2 U	< 2 U	< 1 U	< 1.0 U	< 1 U	< 2 U
Chloroform	7	µg/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U
Chloromethane	NSL	µg/L	< 2 U	< 2 U	< 2 U	< 1 U	< 1.0 U	0.28 J	< 2 U
Cis -1,2-Dichloroethylene	5	µg/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Cyclohexane	NSL	µg/L	1.8 J	0.64 J	0.25 J	< 1 U	< 1.0 U	< 1 U	NA
Ethylbenzene	5	µg/L	0.28 J	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
m,p-Xylene	NSL	µg/L	2.7	0.78 J	< 2 U	< 2 U	< 2.0 U	< 2 U	< 2 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	1.6 J	< 5 U	< 5 UJ	< 5 U	< 5.0 U	< 5 U	< 20 U
Methylcyclohexane	NSL	µg/L	2.8	1.1	0.48 J	< 1 U	< 1.0 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	0.78 J	0.27 J	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Tetrachloroethylene (PCE)	5	µg/L	< 1 U	< 1 U	< 1 U	0.46 J	0.78 J	< 1 U	< 1 U
Toluene	5	µg/L	3.1	0.97 J	0.26 J	< 1 U	< 1.0 U	< 1 U	< 1 U
Trans -1,2-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Trichloroethylene (TCE)	5	µg/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

U = Analyte not detected.

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			DP-021					
			828149-GW021011	828149-DP2107	828149-DP021009	828149-DP021009	828149-DP021009	828149-DP-21
			5/23/2013	7/23/2013	4/27/2016	10/11/2017	5/8/2019	6/6/2023
			Method SW8260					
Analyte	NYSDEC AWQS ¹	Unit						
1,1,1-Trichloroethane (TCA)	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,1-Dichloroethane	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,1-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	NA	< 40 UJ	< 40 U	< 40 U	< 0.21 U
Acetone	50	µg/L	5.2 J	< 10 UJ	< 5 U	1.8 J	< 5 U	< 50 U
Benzene	1	µg/L	0.82 J	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Bromodichloromethane	50	µg/L	< 1 U	1.2	< 1 U	< 1.0 U	< 1 U	< 0.5 U
Bromomethane	5	µg/L	< 2 UJ	< 2 UJ	< 1 U	< 1.0 U	< 1 U	< 2 U
Carbon Disulfide	60	µg/L	0.33 J	< 1 U	< 1 U	< 1.0 U	< 1 U	< 5 U
Chloroethane	5	µg/L	< 2 U	< 2 U	< 1 U	< 1.0 U	< 1 U	< 2 U
Chloroform	7	µg/L	4.2	15	0.55 J	8.3	0.3 J	2.7
Chloromethane	NSL	µg/L	< 2 U	< 2 U	< 1 U	< 1.0 U	< 1 U	< 2 U
<i>Cis</i> -1,2-Dichloroethylene	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Cyclohexane	NSL	µg/L	1.6 J	< 2 U	< 1 U	< 1.0 U	< 1 U	NA
Ethylbenzene	5	µg/L	0.21 J	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
m,p-Xylene	NSL	µg/L	2.4	< 2 U	< 2 U	< 2.0 U	< 2 U	< 2 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 5 U	< 5 UJ	< 5 U	< 5.0 U	< 5 U	< 20 U
Methylcyclohexane	NSL	µg/L	2.9	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	0.66 J	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Tetrachloroethylene (PCE)	5	µg/L	1.9	2.1	3.8	5.4	1.8	1.6
Toluene	5	µg/L	2.2	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
<i>Trans</i> -1,2-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Trichloroethylene (TCE)	5	µg/L	< 1 U	< 1 U	< 1 U	0.33 J	< 1 U	< 1 U
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
µg/L = Microgram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
U = Analyte not detected.
J = Concentration is estimated.
J+ = Concentration is estimated, biased high.
NA = Not analyzed.
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
VOC = Volatile organic compounds
Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			GEMW-1				GEMW-2				
			828149-GEMW00101	828149-GEMW00101	828149-GEMW00101	828149-GEMW00101	828149-GEMW00201	828149-GEMW00201	828149-GEMW00201	828149-GEMW00201	828149-GEMW-2
			7/24/2013	4/27/2016	10/11/2017	5/7/2019	7/24/2013	4/26/2016	10/10/2017	5/8/2019	6/6/2023
			Method SW8260								
Analyte	NYSDEC AWQS ¹	Unit									
1,1,1-Trichloroethane (TCA)	5	µg/L	< 1 U	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,1-Dichloroethane	5	µg/L	0.38 J	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,1-Dichloroethene	5	µg/L	5	5.2	5.2	1.1	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	< 80 UJ	< 200 U	< 40 U	NA	< 40 UJ	< 40 U	< 40 U	< 0.21 U
Acetone	50	µg/L	< 10 U	4.6 J	< 25 U	< 5 U	< 10 U	1.7 J	< 5.0 U	< 5 U	< 50 U
Benzene	1	µg/L	< 1 U	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Bromodichloromethane	50	µg/L	< 1 U	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 0.5 U
Bromomethane	5	µg/L	< 2 U	< 2 U	< 5.0 U	< 1 U	< 2 U	< 1 U	0.31 J	< 1 U	< 2 U
Carbon Disulfide	60	µg/L	< 1 U	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 5 U
Chloroethane	5	µg/L	< 2 U	< 2 U	< 5.0 U	< 1 U	< 2 U	< 1 U	< 1.0 U	< 1 U	< 2 U
Chloroform	7	µg/L	< 1 U	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U
Chloromethane	NSL	µg/L	< 2 U	< 2 U	< 5.0 U	< 1 U	< 2 U	< 1 U	< 1.0 U	< 1 U	< 2 U
Cis -1,2-Dichloroethylene	5	µg/L	310	600	520	150	14	4	3.3	0.94 J	0.27 J
Cyclohexane	NSL	µg/L	< 2 U	< 2 U	< 5.0 U	< 1 U	< 2 U	< 1 U	< 1.0 U	< 1 U	NA
Ethylbenzene	5	µg/L	< 1 U	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
m,p-Xylene	NSL	µg/L	< 2 U	< 4 U	< 10 U	< 2 U	< 2 U	< 2 U	< 2.0 U	< 2 U	< 2 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 5 U	< 10 U	< 25 U	< 5 U	< 5 U	< 5 U	< 5.0 U	< 5 U	< 20 U
Methylcyclohexane	NSL	µg/L	< 1 U	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 1 U	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Tetrachloroethylene (PCE)	5	µg/L	76	200	250	93	230	130	150	81	67
Toluene	5	µg/L	< 1 U	< 2 U	< 5.0 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Trans -1,2-Dichloroethene	5	µg/L	2.4	5	3.5 J	1.2	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U
Trichloroethylene (TCE)	5	µg/L	69	120	120	38	5	2.2	3.3	0.93 J	1.1
Vinyl Chloride	2	µg/L	69	32	15 J	7.3	< 1 U	< 1 U	< 1.0 U	< 1 U	< 2 U

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

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NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			MW-1						
			828149-MW001010	828149-MW001010	828149-MW001010D	828149-MW001010	828149-MW001010D	828149-MW001010	828149-MW001010D
			7/24/2013	4/26/2016	828149-MW001010	10/10/2017	828149-MW001010	10/10/2017	828149-MW001010
			7/24/2013	4/26/2016	4/26/2016	10/10/2017	10/10/2017	10/10/2017	5/7/2019
Analyte			NYSDEC AWQS ¹	Unit	Method SW8260				
1,1,1-Trichloroethane (TCA)			5	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
1,1-Dichloroethane			5	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
1,1-Dichloroethene			5	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
1,4-Dioxane (P-Dioxane)			0.35	µg/L	NA	< 2000 UJ	< 2000 UJ	< 2000 U	< 800 U
Acetone			50	µg/L	< 500 U	< 250 U	< 250 U	< 250 U	< 100 U
Benzene			1	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
Bromodichloromethane			50	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
Bromomethane			5	µg/L	< 100 U	< 50 U	< 50 U	< 50 U	< 20 UJ
Carbon Disulfide			60	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
Chloroethane			5	µg/L	< 100 U	< 50 U	< 50 U	< 50 U	< 20 U
Chloroform			7	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
Chloromethane			NSL	µg/L	< 100 U	< 50 U	< 50 U	13 J	< 20 U
Cis -1,2-Dichloroethylene			5	µg/L	660	320	330	340	310
Cyclohexane			NSL	µg/L	< 100 U	< 50 U	< 50 U	< 50 U	< 20 U
Ethylbenzene			5	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
m,p-Xylene			NSL	µg/L	< 100 U	< 100 U	< 100 U	< 100 U	< 40 U
Methyl Ethyl Ketone (2-Butanone)			50	µg/L	< 250 U	< 250 U	< 250 U	< 250 U	< 100 U
Methylcyclohexane			NSL	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
O-Xylene (1,2-Dimethylbenzene)			5	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
Tetrachloroethylene (PCE)			5	µg/L	11000	8400	8500	9700	9600
Toluene			5	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
Trans -1,2-Dichloroethene			5	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U
Trichloroethylene (TCE)			5	µg/L	260	180	190	260	240
Vinyl Chloride			2	µg/L	< 50 U	< 50 U	< 50 U	< 50 U	< 20 U

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

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ID = Identification

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J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			MW-2					
			828149-MW002010	828149-MW002010	828149-MW002010	828149-MW002010	828149-MW-2	828149-FD-01
			7/24/2013	4/27/2016	10/11/2017	5/8/2019	6/5/2023	828149-MW-2
			7/24/2013	4/27/2016	10/11/2017	5/8/2019	6/5/2023	6/5/2023
Analyte	NYSDEC AWQS ¹	Unit	Method SW8260					
1,1,1-Trichloroethane (TCA)	5	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 1 U	< 1 U
1,1-Dichloroethane	5	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 1 U	< 1 U
1,1-Dichloroethene	5	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 1 U	< 1 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	< 20000 UJ	< 20000 U	< 20000 U	< 0.2 U	< 0.21 U
Acetone	50	µg/L	< 2500 UJ	< 2500 U	< 2500 U	< 2500 U	< 50 U	< 50 U
Benzene	1	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 1 U	< 1 U
Bromodichloromethane	50	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 0.5 U	< 0.5 U
Bromomethane	5	µg/L	< 500 UJ	< 500 U	< 500 U	< 500 U	< 2 U	< 2 U
Carbon Disulfide	60	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 5 U	< 5 U
Chloroethane	5	µg/L	< 500 U	< 500 U	< 500 U	< 500 U	< 2 U	< 2 U
Chloroform	7	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 2 U	< 2 U
Chloromethane	NSL	µg/L	< 500 U	< 500 U	< 500 U	< 500 U	< 2 U	< 2 U
Cis -1,2-Dichloroethylene	5	µg/L	260	< 500 U	< 500 U	< 500 U	22	21
Cyclohexane	NSL	µg/L	< 500 U	< 500 U	< 500 U	< 500 U	NA	NA
Ethylbenzene	5	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 1 U	< 1 U
m,p-Xylene	NSL	µg/L	< 500 U	< 1000 U	< 1000 U	< 1000 U	< 2 U	< 2 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 1300 UJ	< 2500 U	< 2500 U	< 2500 U	< 20 U	< 20 U
Methylcyclohexane	NSL	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 1 U	< 1 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 1 U	< 1 U
Tetrachloroethylene (PCE)	5	µg/L	90000	85000	69000	63000	69	70
Toluene	5	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 1 U	< 1 U
Trans -1,2-Dichloroethene	5	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	0.31 J	0.36 J
Trichloroethylene (TCE)	5	µg/L	410	240 J	170 J	160 J	18	17
Vinyl Chloride	2	µg/L	< 250 U	< 500 U	< 500 U	< 500 U	< 2 U	< 2 U

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

U = Analyte not detected.

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			MW-3								
			828149-MW003010	828149-MW003010D	828149-MW003009	828149-MW003009D	828149-MW003009	828149-MW003009D	828149-MW003009	828149-MW003009D	828149-MW-3
			7/23/2013	828149-MW003010 7/23/2013	4/27/2016	828149-MW003009 4/27/2016	10/12/2017	828149-MW003009 10/12/2017	5/6/2019	828149-MW003009 5/6/2019	6/6/2023
			Method SW8260								
Analyte	NYSDEC AWQS ¹	Unit									
1,1,1-Trichloroethane (TCA)	5	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 40 U
1,1-Dichloroethane	5	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 40 U
1,1-Dichloroethene	5	µg/L	16	15	11	11	8.5	8.2	6.2	6.3	< 40 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	NA	< 200 UJ	< 200 UJ	1.1	< 200 U	< 200 U	< 200 U	< 0.2 U
Acetone	50	µg/L	< 50 U	< 100 UJ	7 J	7.1 J	< 25 U	< 25 U	< 25 U	< 25 U	< 2000 U
Benzene	1	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 40 U
Bromodichloromethane	50	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 20 U
Bromomethane	5	µg/L	< 10 U	< 20 UJ	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 80 U
Carbon Disulfide	60	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 200 U
Chloroethane	5	µg/L	< 10 U	< 20 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 80 U
Chloroform	7	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 80 U
Chloromethane	NSL	µg/L	< 10 U	< 20 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 80 U
Cis -1,2-Dichloroethylene	5	µg/L	890	840	850	710	670	690	530	530	330
Cyclohexane	NSL	µg/L	< 10 U	< 20 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	NA
Ethylbenzene	5	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 40 U
m,p-Xylene	NSL	µg/L	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 80 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 25 U	16 J	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 800 U
Methylcyclohexane	NSL	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 40 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 40 U
Tetrachloroethylene (PCE)	5	µg/L	2200	1800	790	790	650	670	390	380	2000
Toluene	5	µg/L	< 5 U	< 10 U	< 5 U	< 5 U	< 5.0 U	< 5.0 U	< 5 U	< 5 U	< 40 U
Trans -1,2-Dichloroethene	5	µg/L	7.1	6 J	12	12	5.1	5.3	3.6 J	3.6 J	< 40 U
Trichloroethylene (TCE)	5	µg/L	450	410	320	240	310	320	220	220	160
Vinyl Chloride	2	µg/L	260	260	200	160	200 J	200 J	190	190	< 80 U

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

U = Analyte not detected.

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 4. Historical Overburden VOC Analytical Results

Location ID Sample Name Parent Sample ID Sample Date			MW-10				MW-13				
			828149-MW010010	828149-MW010010	828149-MW010010	828149-MW010010	828149-MW1307	828149-MW013012	828149-MW013012	828149-MW013012	828149-MW-13
			7/24/2013	4/28/2016	10/11/2017	5/9/2019	7/24/2013	4/28/2016	10/12/2017	5/7/2019	6/5/2023
			Method SW8260								
Analyte	NYSDEC AWQS ¹	Unit									
1,1,1-Trichloroethane (TCA)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 50 U
1,1-Dichloroethane	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 50 U
1,1-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 50 U
1,4-Dioxane (P-Dioxane)	0.35	µg/L	NA	< 40 UJ	< 40 U	< 40 U	NA	< 2000 UJ	0.26 J	< 400 U	< 0.2 U
Acetone	50	µg/L	< 10 U	1.6 J	1.4 J	< 5 U	< 500 U	< 250 U	< 250 U	< 50 U	< 2500 U
Benzene	1	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 50 U
Bromodichloromethane	50	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 25 U
Bromomethane	5	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 U	< 100 UJ	< 50 U	< 50 U	< 10 U	< 100 U
Carbon Disulfide	60	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 250 U
Chloroethane	5	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 U	< 100 U	< 50 U	< 50 U	< 10 U	< 100 U
Chloroform	7	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 100 U
Chloromethane	NSL	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 U	< 100 U	< 50 U	< 50 U	< 10 U	< 100 U
Cis -1,2-Dichloroethylene	5	µg/L	< 1 U	< 1 U	4.5	< 1 U	680	590	770	160	170
Cyclohexane	NSL	µg/L	< 2 U	< 1 U	< 1.0 U	< 1 U	< 100 U	< 50 U	< 50 U	< 10 U	NA
Ethylbenzene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 50 U
m,p-Xylene	NSL	µg/L	< 2 U	< 2 U	< 2.0 U	< 2 U	NA	< 100 U	< 100 U	< 20 U	< 100 U
Methyl Ethyl Ketone (2-Butanone)	50	µg/L	< 5 U	< 5 U	< 5.0 U	< 5 U	< 250 U	< 250 U	< 250 U	< 50 U	< 1000 U
Methylcyclohexane	NSL	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 50 U
O-Xylene (1,2-Dimethylbenzene)	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 50 U
Tetrachloroethylene (PCE)	5	µg/L	28	< 1 U	130	< 1 U	14000	12000	4100	2300	3200
Toluene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 50 U
Trans -1,2-Dichloroethene	5	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 50 U
Trichloroethylene (TCE)	5	µg/L	0.38 J	< 1 U	3	< 1 U	380	350	200	190	120
Vinyl Chloride	2	µg/L	< 1 U	< 1 U	< 1.0 U	< 1 U	< 50 U	< 50 U	< 50 U	< 10 U	< 100 U

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

µg/L = Microgram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

U = Analyte not detected.

J = Concentration is estimated.

J+ = Concentration is estimated, biased high.

NA = Not analyzed.

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 5. Groundwater Sample Analytical Results- Emerging Contaminants

Analyte	NYSDEC AWQS	Well ID	DP-015	DP-017	DP-018	DP-019	DP-020	DP-021	GEMW-02	MW-02	MW-03	MW-13	MW-13B	MW-17B	MW-19B	MW-21B
		Well Depth	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Overburden	Bedrock	Bedrock	Bedrock	Bedrock
		Sample Date	6/6/2023	6/5/2023	6/6/2023	6/6/2023	6/6/2023	6/6/2023	6/6/2023	6/5/2023	6/6/2023	6/5/2023	6/5/2023	6/5/2023	6/6/2023	6/6/2023
		Unit	EPA Method 1633													
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	ng/L	ND	ND	520	ND	1.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid (PFBS)	NSL	ng/L	ND	3.4	ND	2.2 J	4.6	5.9	ND	1.5	2.4	4	ND	0.41 J	1.4	7.8
Perfluorobutanoic Acid	NSL	ng/L	ND	6	ND	8	7.4	10	ND	4.0 J	8.9	16	2.3 J	1.5 J	5.4	6.5
Perfluoroheptanoic acid (PFHpA)	NSL	ng/L	ND	0.36 J	ND	ND	0.45 J	1.3	ND	ND	1.8	2.8	ND	ND	0.27 J	0.89 J
Perfluorohexanesulfonic acid (PFHxS)	NSL	ng/L	ND	ND	ND	ND	0.60 J	5.5	ND	ND	0.62 J	2.2	ND	ND	0.23 J	5.6
Perfluorohexanoic acid (PFHxA)	NSL	ng/L	ND	0.47 J	ND	1.2 J	1.7	3.2	ND	0.36	2.8	4.5	0.31 J	ND	0.84 J	1.7
Perfluorononanoic acid (PFNA)	NSL	ng/L	ND	ND	ND	ND	ND	ND	ND	ND	0.25 J	0.22 J	ND	ND	ND	ND
Perfluorooctanesulfonic acid (PFOS)	2.7	ng/L	ND	ND	ND	ND	3.6	1.3	ND	ND	1.4	12	ND	ND	ND	ND
Perfluorooctanoic acid (PFOA)	6.7	ng/L	ND	0.68 J	ND	1.3 J	1.1	4	ND	0.27 J	3.7	10	ND	ND	0.37 J	3
Perfluoropentanesulfonic Acid (PFPeS)	NSL	ng/L	ND	ND	ND	ND	ND	0.26 J	ND	ND	ND	0.64 J	ND	ND	ND	ND
Perfluoropentanoic Acid (PFPeA)	NSL	ng/L	ND	0.89 J	ND	ND	1.5 J	2.1	ND	0.68 J	2.5	5.5	0.37 J	ND	1.3 J	1.6 J

Notes:

AWQS = Ambient Water Quality Standards

EPA= U.S. Environmental Protection Agency

ID = Identification

J = Estimated value due to either being a Tentatively Identified Compound or that the concentration is between the Method Reporting Limit and the Method Detection Limit. Concentrations are not verified within the linear range of the calibration.

ND = Not detected

ng/L = Nanogram(s) per liter

NSL = No screening level available

NYSDEC = New York State Department of Environmental Conservation

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

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Table 6. Historical Emerging Contaminants Analytical Results

Targeted Unit Location ID Sample Name Parent Sample ID Sample Date			Overburden					
			DP-015	DP-017		DP-018	DP-019	DP-020
			828149-DP-15	828149-DP017015	828149-DP-17	828149-DP-18	828149-DP-19	828149-DP-20
			6/6/2023	10/12/2017	6/5/2023	6/6/2023	6/6/2023	6/6/2023
Analyte	NYSDEC AWQS ¹	Unit	EPA Method 1633 and 537					
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	ng/L	< 400 U	NA	< 3.9 U	520	< 20 U	1.1 J
Perfluorobutanesulfonic acid (PFBS)	NSL	ng/L	< 100 U	4.9	3.4	< 100 U	2.2 J	4.6
Perfluorobutanoic Acid	NSL	ng/L	< 400 U	2.6	6	< 400 U	8.0 J	7.4
Perfluorodecanoic acid (PFDA)	NSL	ng/L	< 100 U	< 2.0 U	< 0.98 U	< 100 U	< 5 U	< 0.99 U
Perfluoroheptanesulfonic acid (PFHpS)	NSL	ng/L	< 100 U	< 2.0 U	< 0.98 U	< 100 U	< 5 U	< 0.99 U
Perfluoroheptanoic acid (PFHpA)	NSL	ng/L	< 100 U	< 2.0 U	0.36 J	< 100 U	< 5 U	0.45 J
Perfluorohexanesulfonic acid (PFHxS)	NSL	ng/L	< 100 U	< 2.0 U	< 0.98 U	< 100 U	< 5 U	0.60 J
Perfluorohexanoic acid (PFHxA)	NSL	ng/L	< 100 U	< 2.0 U	0.47 J	< 100 U	1.2 J	1.7
Perfluorononanoic acid (PFNA)	NSL	ng/L	< 100 U	< 2.0 U	< 0.98 U	< 100 U	< 5 U	< 0.99 U
Perfluorooctane Sulfonamide (FOSA)	NSL	ng/L	< 100 U	< 41 UJ	< 0.98 U	< 100 U	< 5 U	< 0.99 U
Perfluorooctanesulfonic acid (PFOS)	2.7	ng/L	< 100 U	< 2.0 U	< 0.98 U	< 100 U	< 5 U	3.6
Perfluorooctanoic acid (PFOA)	6.7	ng/L	< 100 U	< 2.0 U	0.68 J	< 100 U	1.3 J	1.1
Perfluoropentanesulfonic Acid (PFPeS)	NSL	ng/L	< 100 U	NA	< 0.98 U	< 100 U	< 5 U	< 0.99 U
Perfluoropentanoic Acid (PFPeA)	NSL	ng/L	< 200 U	< 2.0 U	0.89 J	< 200 U	< 10 U	1.5 J

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
ng/L = Nanogram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
U = Analyte not detected.
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 6. Historical Emerging Contaminants Analytical Results

Targeted Unit Location ID Sample Name Parent Sample ID Sample Date			Overburden									
			DP-021 828149-DP-21 6/6/2023	GEMW-2 828149-GEMW-2 6/6/2023	MW-2 828149-MW-2 6/5/2023		MW-3 828149-FD-01 828149-MW-2_20230605 6/5/2023		MW-13 828149-MW003009 828149-MW-3 10/12/2017		MW-13 828149-MW013012 828149-MW-13 6/6/2023	
Analyte	NYSDEC AWQS ¹	Unit	EPA Method 1633 and 537									
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	ng/L	< 4.1 U	< 40 U	< 4 U	< 4.1 U	NA	< 4.1 U	NA	< 4.1 U		
Perfluorobutanesulfonic acid (PFBS)	NSL	ng/L	5.9	< 10 U	1.5	1.5	8.8	2.4	4.3	4		
Perfluorobutanoic Acid	NSL	ng/L	10	< 40 U	4.0 J	4.3	7.5	8.9	8.9	16		
Perfluorodecanoic acid (PFDA)	NSL	ng/L	< 1 U	< 10 U	< 1 U	< 1 U	3.4	< 1 U	< 2.1 U	< 1 U		
Perfluoroheptanesulfonic acid (PFHpS)	NSL	ng/L	< 1 U	< 10 U	< 1 U	< 1 U	1 J	< 1 U	< 2.1 U	< 1 U		
Perfluoroheptanoic acid (PFHpA)	NSL	ng/L	1.3	< 10 U	< 1 U	< 1 U	< 2.0 U	1.8	2.3	2.8		
Perfluorohexanesulfonic acid (PFHxS)	NSL	ng/L	5.5	< 10 U	< 1 U	< 1 U	3.4	0.62 J	2.9	2.2		
Perfluorohexanoic acid (PFHxA)	NSL	ng/L	3.2	< 10 U	0.36 J	0.44 J	9.6	2.8	3.8	4.5		
Perfluorononanoic acid (PFNA)	NSL	ng/L	< 1 U	< 10 U	< 1 U	< 1 U	5.1	0.25 J	< 2.1 U	0.22 J		
Perfluorooctane Sulfonamide (FOSA)	NSL	ng/L	< 1 U	< 10 U	< 1 U	< 1 U	2.4 J	< 1 U	< 41 UJ	< 1 U		
Perfluorooctanesulfonic acid (PFOS)	2.7	ng/L	1.3	< 10 U	< 1 U	< 1 U	87	1.4	6.3	12		
Perfluorooctanoic acid (PFOA)	6.7	ng/L	4	< 10 U	0.27 J	0.27 J	17	3.7	7.4	10		
Perfluoropentanesulfonic Acid (PFPeS)	NSL	ng/L	0.26 J	< 10 U	< 1 U	< 1 U	NA	< 1 U	NA	0.64 J		
Perfluoropentanoic Acid (PFPeA)	NSL	ng/L	2.1	< 20 U	0.68 J	0.76 J	11	2.5	3.9	5.5		

Notes:
1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).
This table shows detected analytes only.
ng/L = Nanogram(s) per liter
AWQS = Ambient water quality standards
EPA = U.S. Environmental Protection Agency
ID = Identification
U = Analyte not detected.
J = Concentration is estimated.
NA = Not analyzed
NSL = No screening level available.
NYSCRR = New York Codes, Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
TOGS = Technical and Operational Guidance Series
VOC = Volatile organic compounds
Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

Table 6. Historical Emerging Contaminants Analytical Results

Targeted Unit Location ID Sample Name Parent Sample ID Sample Date			Bedrock				
			MW-2B	MW-13B	MW-17B	MW-19B	MW-21B
			828149-MW02B020	828149-MW-13B	828149-MW-17B	828149-MW-19B	828149-MW-21B
			10/12/2017	6/5/2023	6/5/2023	6/6/2023	6/6/2023
			EPA Method 1633 and 537				
Analyte	NYSDEC AWQS ¹	Unit					
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	ng/L	NA	< 4 U	< 4 U	< 4 U	< 4.1 U
Perfluorobutanesulfonic acid (PFBS)	NSL	ng/L	1.6 J	< 0.99 U	0.41 J	1.4	7.8
Perfluorobutanoic Acid	NSL	ng/L	4.9	2.3 J	1.5 J	5.4	6.5
Perfluorodecanoic acid (PFDA)	NSL	ng/L	< 2.0 U	< 0.99 U	< 1 U	< 1 U	< 1 U
Perfluoroheptanesulfonic acid (PFHpS)	NSL	ng/L	< 2.0 U	< 0.99 U	< 1 U	< 1 U	< 1 U
Perfluoroheptanoic acid (PFHpA)	NSL	ng/L	< 2.0 U	< 0.99 U	< 1 U	0.27 J	0.89 J
Perfluorohexanesulfonic acid (PFHxS)	NSL	ng/L	< 2.0 U	< 0.99 U	< 1 U	0.23 J	5.6
Perfluorohexanoic acid (PFHxA)	NSL	ng/L	< 2.0 U	0.31 J	< 1 U	0.84 J	1.7
Perfluorononanoic acid (PFNA)	NSL	ng/L	< 2.0 U	< 0.99 U	< 1 U	< 1 U	< 1 U
Perfluorooctane Sulfonamide (FOSA)	NSL	ng/L	0.72 J	< 0.99 U	< 1 U	< 1 U	< 1 U
Perfluorooctanesulfonic acid (PFOS)	2.7	ng/L	< 2.0 U	< 0.99 U	< 1 U	< 1 U	< 1 U
Perfluorooctanoic acid (PFOA)	6.7	ng/L	< 2.0 U	< 0.99 U	< 1 U	0.37 J	3
Perfluoropentanesulfonic Acid (PFPeS)	NSL	ng/L	NA	< 0.99 U	< 1 U	< 1 U	< 1 U
Perfluoropentanoic Acid (PFPeA)	NSL	ng/L	< 2.0 U	0.37 J	< 2 U	1.3 J	1.6 J

Notes:

1. Screening level is the NYSDEC Class GA AWQS and Guidance Values (TOGS 1.1.1 and 6 NYCRR Part 703).

This table shows detected analytes only.

ng/L = Nanogram(s) per liter

AWQS = Ambient water quality standards

EPA = U.S. Environmental Protection Agency

ID = Identification

U = Analyte not detected.

J = Concentration is estimated.

NA = Not analyzed

NSL = No screening level available.

NYSCRR = New York Codes, Rules and Regulations

NYSDEC = New York State Department of Environmental Conservation

TOGS = Technical and Operational Guidance Series

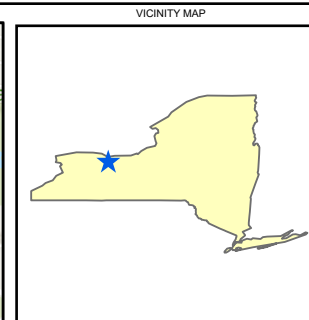
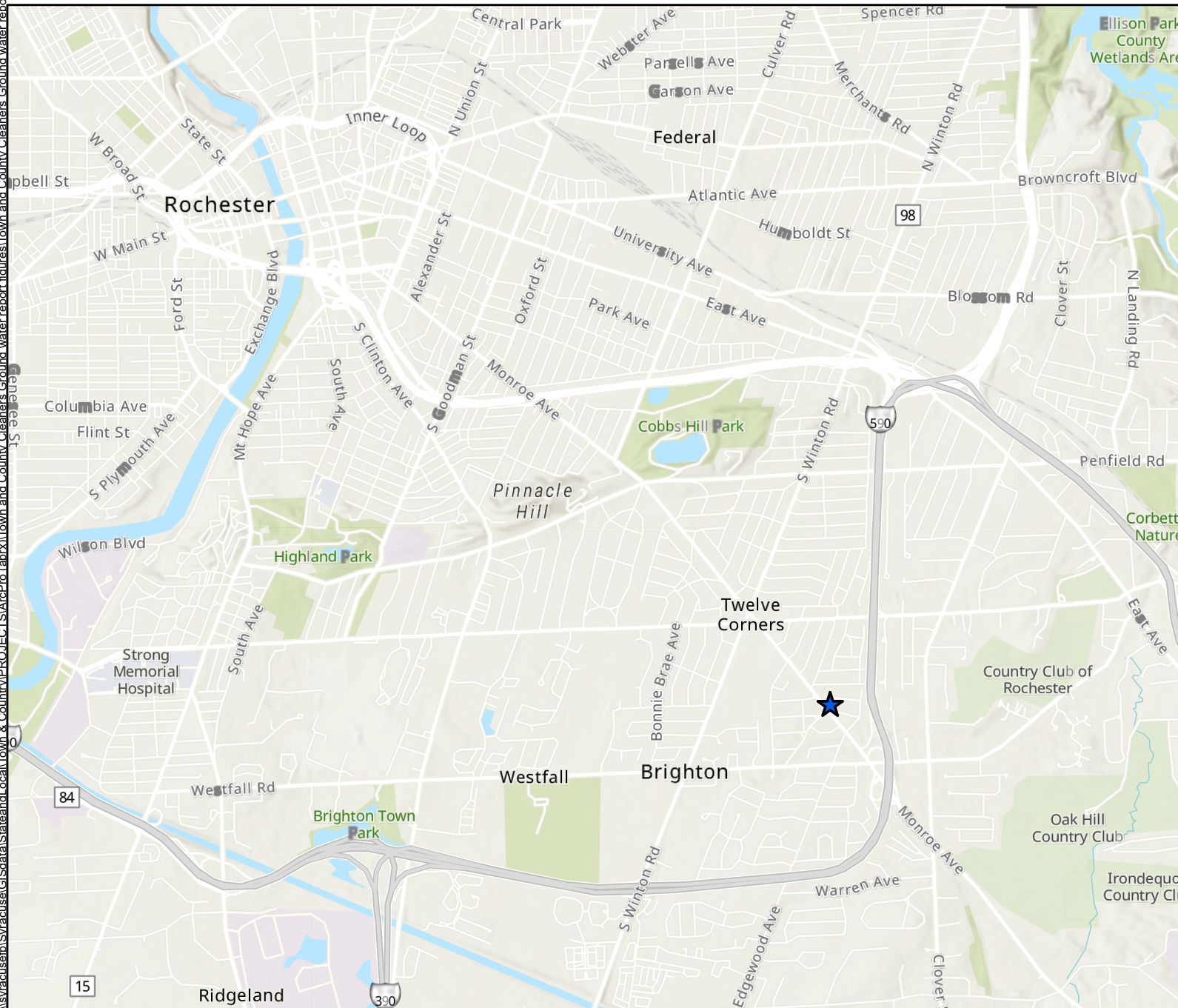
VOC = Volatile organic compounds

Bold and Shaded values indicate that the analyte was detected greater than the NYSDEC AWQS

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Figures

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Legend

★ Site Location



0 0.5 1 Miles

Map Date: 8/3/2023
Projection: WGS 1984 Web Mercator
(auxiliary sphere)



Figure 1
General Site Location
Town and Country Cleaners
Brighton, New York

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Legend

- ★ Site Location
- ⬮ Overburden Well
- ⬮ Bedrock Well
- ⬮ Overburden Well Not Found
- ⬮ Bedrock Well Not Found
- Site Building
- ▭ Site Boundary
- ▭ Approximate Limit of Completed Hazardous Excavation
- ▭ Approximate Limit of Completed Non-Hazardous Excavation
- ▭ Limit of IRM Excavation

Notes:
IRM: Interim Remedial Measure

Map Date: 9/18/2023
Projection: NAD83 New York State Plane West US Feet
Source: ESRI 2022, NYS

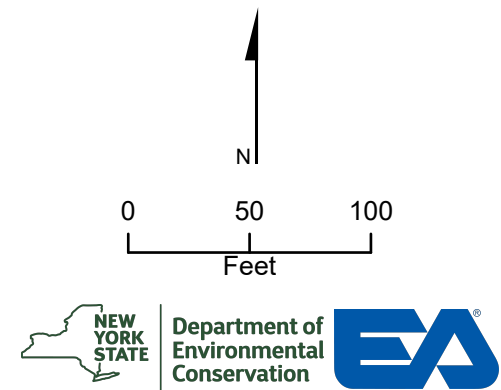


Figure 2
Site Layout
Town and Country Dry Cleaners
Brighton, New York

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Legend

- ★ Site Location
- ⬮ Overburden Well
- ⬮ Bedrock Well
- ⬮ Overburden Well - Not Found
- ⬮ Bedrock Well - Not Found
- Groundwater Elevation
- - - Inferred Groundwater Elevation
- Site Building
- Site Boundary
- Approximate Limit of Completed Hazardous Excavation
- Approximate Limit of Completed Non-Hazardous Excavation
- Limit of IRM Excavation

Notes:
IRM: Interim Remedial Measure
NF: Not Found
A: Abandoned
NA: Not Applicable (Bedrock Wells)

Elevation contours are shown in feet above mean sea level.
Highlighted wells were considered when drawing contours.

Map Date: 9/22/2023
Projection: NAD83 New York State Plane West US Feet
Source: ESRI, NYS

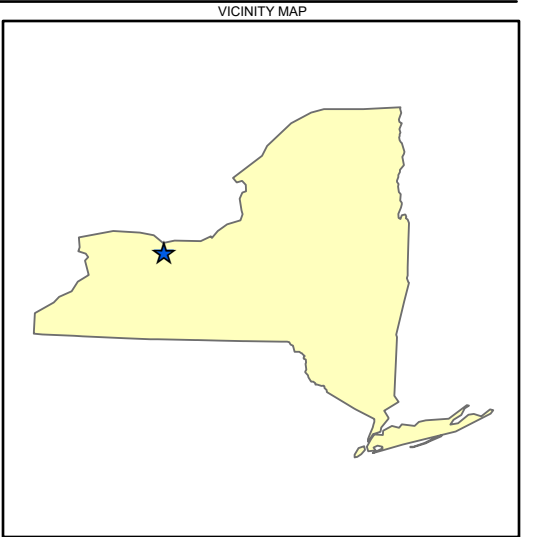
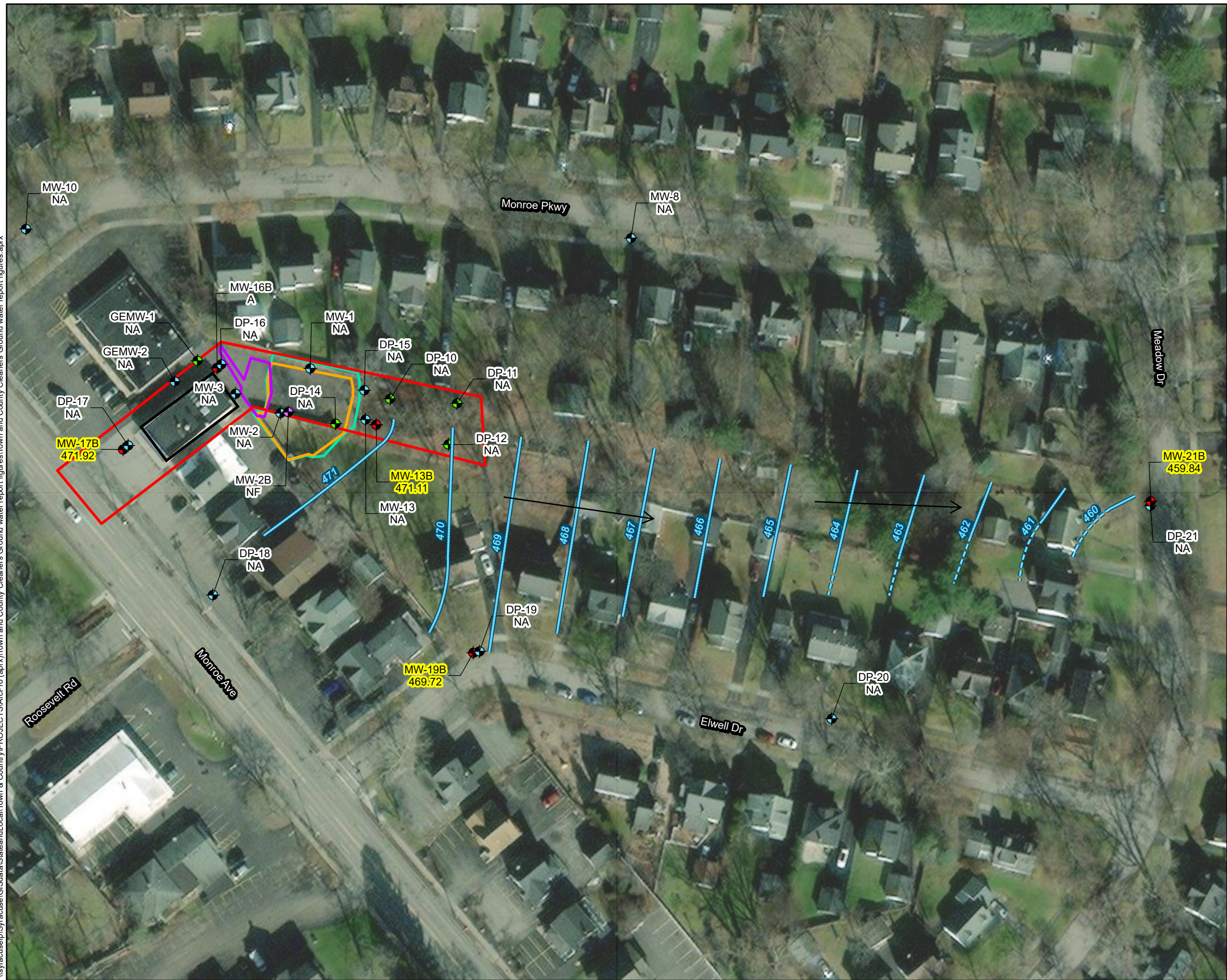
0 50 100
Feet

N

NEW YORK STATE Department of Environmental Conservation EA

Figure 3
June 2023 Overburden Groundwater Elevation Contour
Town and Country Dry Cleaners
Brighton, New York

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Legend

- ★ Site Location
- ⬮ Overburden Well
- ⬮ Bedrock Well
- ⬮ Overburden Well - Not Found
- ⬮ Bedrock Well - Not Found
- Groundwater Elevation
- - - Inferred Groundwater Elevation
- Site Building
- Site Boundary
- Limit of IRM Excavation
- Approximate Limit of Completed Hazardous Excavation
- Approximate Limit of Completed Non-Hazardous Evacuation

Notes:
IRM: Interim Remedial Measure
NF: Not Found
A: Abandoned
NA: Not Applicable (Overburden Wells)

Elevation contours are shown in feet above mean sea level.
Highlighted wells were considered when drawing contours.

Map Date: 9/22/2023
Projection: NAD83 New York State Plane West US Feet
Source: ESRI, NYS

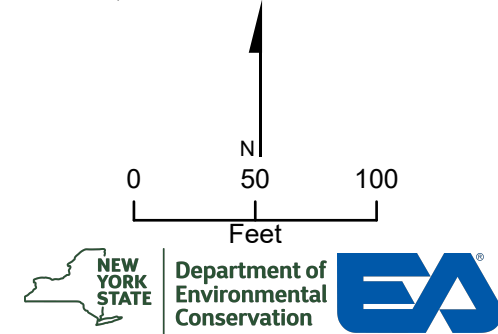
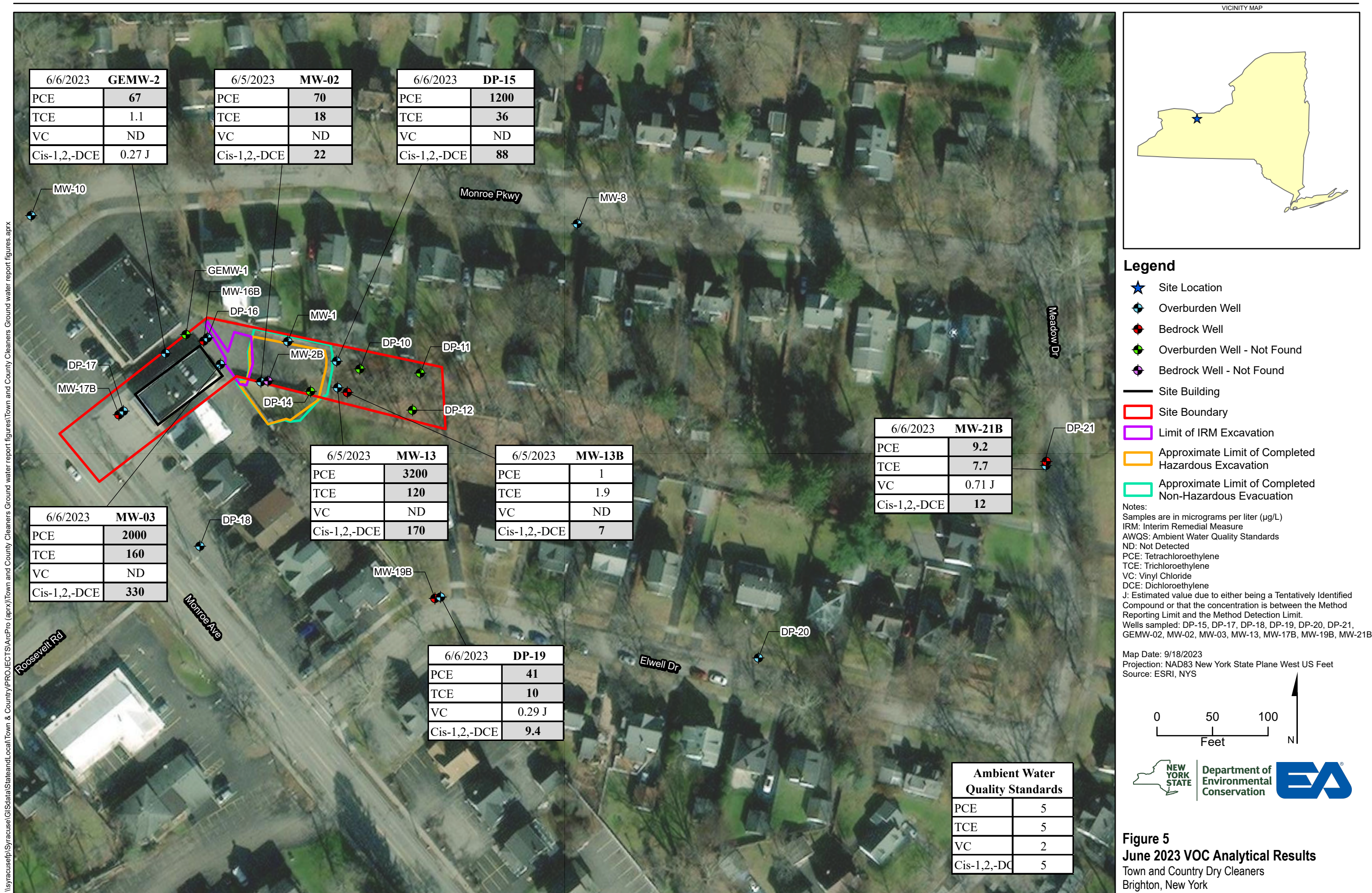
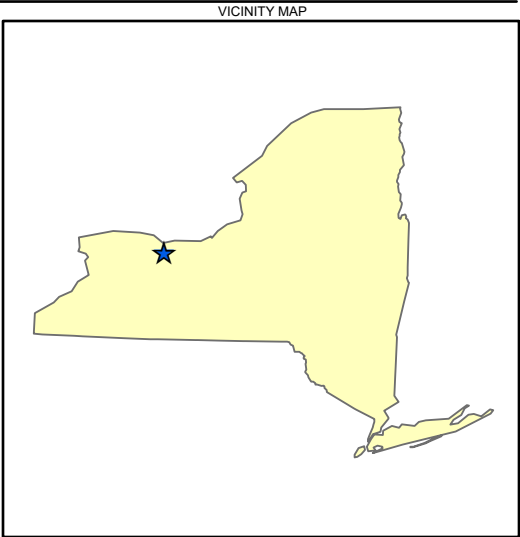


Figure 4
June 2023 Bedrock Groundwater
Elevation Contour
Town and Country Dry Cleaners
Brighton, New York

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Legend

- ★ Site Location
- Overburden Well
- Bedrock Well
- Overburden Well - Not Found
- Bedrock Well - Not Found
- Site Building
- Site Boundary
- Limit of IRM Excavation
- Approximate Limit of Completed Hazardous Excavation
- Approximate Limit of Completed Non-Hazardous Evacuation

Notes:
Shaded and bolded values exceed the NYSDEC AWQS
Samples are in nanogram(s) per liter (ng/L)
IRM: Interim Remedial Measure
AWQS: Ambient Water Quality Standards
ND: Not Detected
PFOS: Perfluorooctanesulfonic acid
PFOA: Perfluorooctanoic acid
Sampled wells include: DP-15, DP-17, DP-18, DP-19, DP-20, DP-21, GEMW-02, MW-02, MW-03, MW-13, MW-13B, MW-17B, MW-19B, MW-21B

Map Date: 9/18/2023
Projection: NAD83 New York State Plane West US Feet
Source: ESRI, NYS

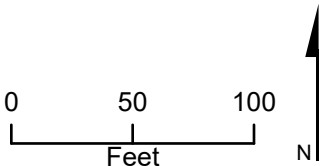


Figure 6
June 2023 Emerging Contaminants
Analytical Results
Town and Country Dry Cleaners
Brighton, New York

Ambient Water Quality Standards	
PFOS	2.7
PFOA	6.7

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VICINITY MAP



Legend

- ★ Site Location
- ⬮ Overburden Well
- ⬮ Bedrock Well
- ⬮ Overburden Well - Not Found
- ⬮ Bedrock Well - Not Found

— Site Building

▭ Site Boundary

PCE Concentration (µg/L)

5-10

Notes:
NA: Not Applicable (Overburden Wells)
A: Abandoned
NS: Not Sampled
ND: Not Detected
NF: Not Found

Samples are in micrograms per liter (µg/L)
Highlighted wells were considered when drawing plumes.

Map Date: 9/22/2023
Projection: NAD83 New York State Plane West US Feet
Source: ESRI, NYS

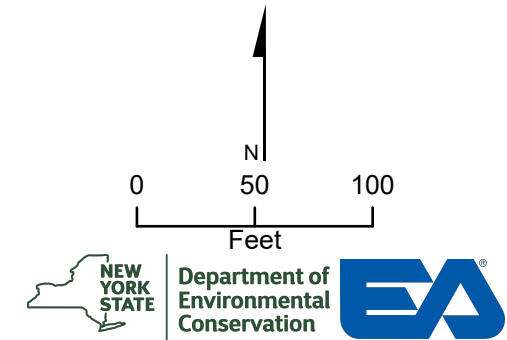


Figure 8
June 2023 PCE Concentrations in
Bedrock
Town and Country Dry Cleaners
Brighton, New York

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VICINITY MAP



Legend

- ★ Site Location
- Overburden Well
- Bedrock Well
- Overburden Well - Not Found
- Bedrock Well - Not Found

Site Building

Site Boundary

TCE Concentration (µg/L)

- 5-10
- 10-100
- 100+

Notes:

- A: Abandoned
- NF: Not Found
- NS: Not Sampled
- NA: Not Applicable (Overburden Wells)
- ND: Not Detected

Samples are in micrograms per liter (µg/L)
Highlighted wells were considered when drawing plumes.

Map Date: 9/22/2023
Projection: NAD83 New York State Plane West US Feet
Source: ESRI, NYS

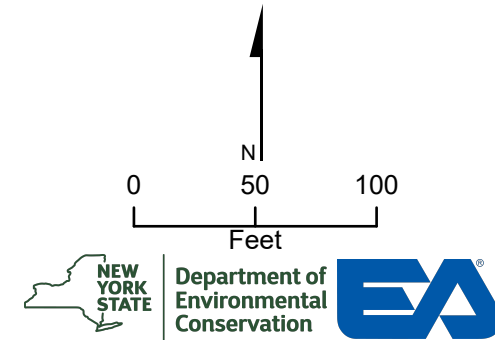
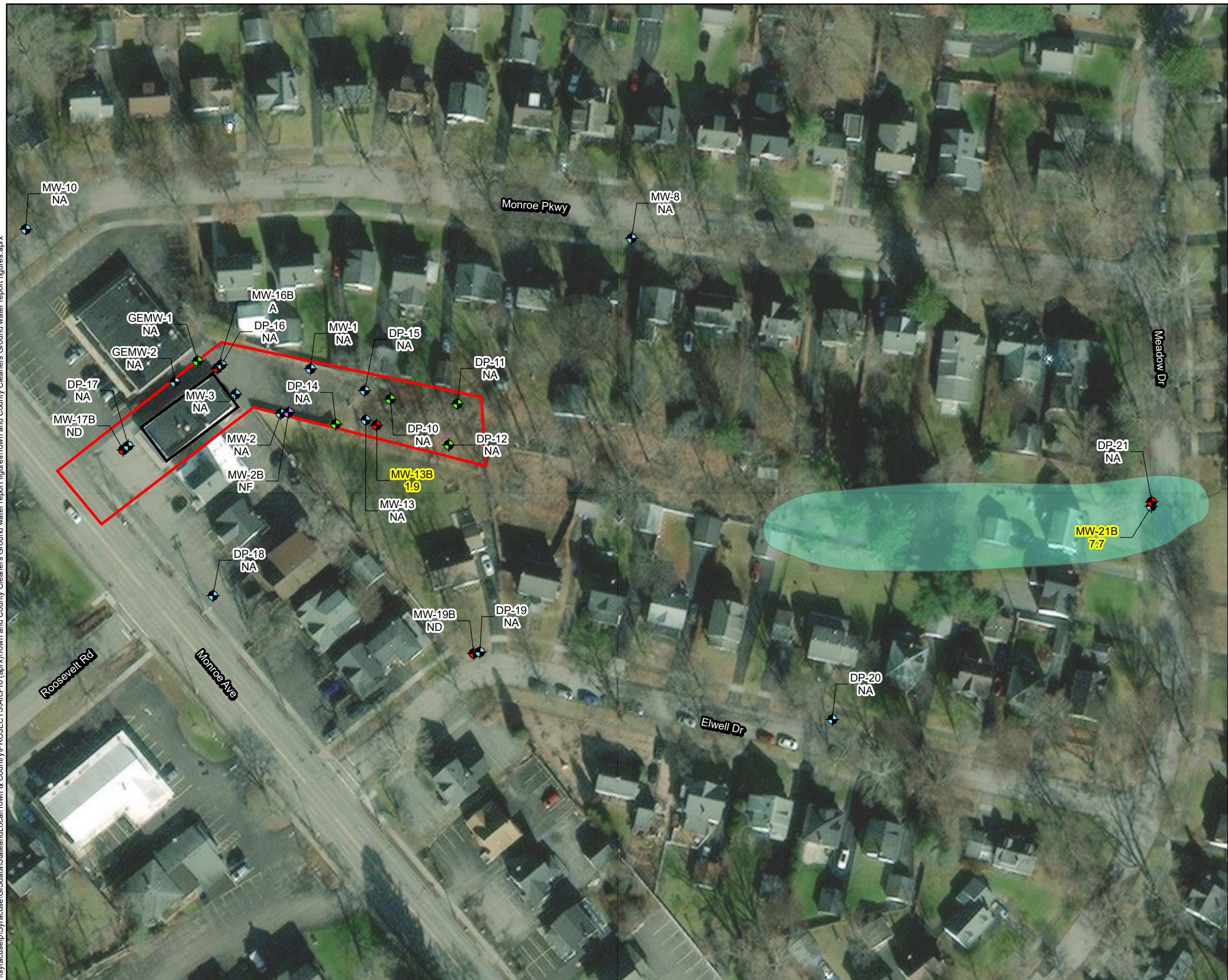


Figure 9
June 2023 TCE Concentrations in
Overburden
Town and Country Dry Cleaners
Brighton, New York

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Legend

- ★ Site Location
- ⬮ Overburden Well
- ⬮ Bedrock Well
- ⬮ Overburden Well - Not Found
- ⬮ Bedrock Well - Not Found

— Site Building

▭ Site Boundary

TCE Concentration (µg/L)

5-10

Notes:
A: Abandoned
NS: Not Sampled
NA: Not Applicable (Overburden Wells)
ND: Not Detected
NF: Not Found

Samples are in micrograms per liter (µg/L)
Highlighted wells were considered when drawing plumes.

Map Date: 9/22/2023
Projection: NAD83 New York State Plane West US Feet
Source: ESRI, NYS

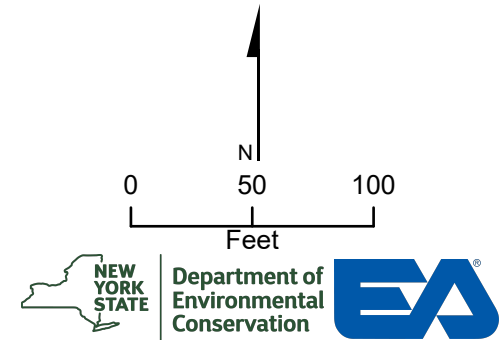


Figure 10
June 2023 TCE Concentrations in
Bedrock
Town and Country Dry Cleaners
Brighton, New York

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Appendix A

Field Forms

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Weather Conditions: 70°F ; Sunny 11 mph NNW

Date/Time: 6/6/23 1600

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-13	EA Personnel: A. Badell, C. Zook	Client: NYS DEC (Town & Country 828 HQ)
Location: Brighton, NY	Well Condition: Good	Weather: 60 F, cloudy
Sounding Method: Heron WLM	Gauge Date: 6/6/23	Measurement Ref: TAC
Stick Up/Down (ft): 3-ft	Gauge Time: 1600	Well Diameter (in): 2

Purge Date: 06/05/23	Purge Time: 1109
Purge Method: LOW FLOW	Field Technician: H. Bedell, C. Zook, M. Gilkey

Well Volume

A. Well Depth (ft): 12.90	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 8.07	E. Well Volume (gal) (C*D): 0.788	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 4.83	F. Three Well Volumes (gal) (E3): 2.36	Pump Intake Depth: mid screen (11.13 ft BTAC)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):
 Samplers: M. G. Wilkey, H. B. Deery
 Sampling Date: 06/15/2013

Sampling Time: 1132
Split Sample With: X
Sample Type: G-10

COMMENTS AND OBSERVATIONS:

PFAS/WL: WUM is ϕ PFAS free; Site wide gauging will take place after sampling to prevent contamination

Tubing: LDPE tubing was found in wells; tubing was removed & replaced w/ HDPE 3/8"



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1 of 2



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GROUNDWATER SAMPLING PURGE FORM

Well ID: MW-13B	EA Personnel: H. Bedell, C. Zook	Client: NYSDEC-Town & Country (82844)
Location: Brighton, NY	Well Condition: Good	Weather: 60°F Sunny
Sounding Method: Heron WLM	Gauge Date: 6/6/23	Measurement Ref: TOC
Stick Up/Down (ft): ~3	Gauge Time: 1600	Well Diameter (in): 2

Purge Date: 06/05/23	Purge Time: 1200
Purge Method: LOW FLOW	Field Technician: H. Bedell, C. Zook, M. Grilkey

Well Volume

A. Well Depth (ft): 25.02	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 9.26	E. Well Volume (gal) C*D): 2.57	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 15.76	F. Three Well Volumes (gal) (E3): 7.716	Pump Intake Depth: mid-screen (n 10ft bTOC)

Water Quality Parameters

Time (hrs)	Temperature (°C)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1206	17.35	7.34	1120	1.70	840	3.09	X	0.25	—
1203	16.96	7.01	98	1.16	344	0.97			0.75
1206	16.90	6.93	86	1.16	167	0.78			1.5
1209	16.44	6.91	90	1.16	142	0.78			2.25
1212	16.33	6.90	91	1.15	77.2	0.75			3.00
1215	16.29	6.90	81	1.15	103	0.77			3.75
1218	16.21	6.90	44	1.14	73.2	0.60			4.5
1221	16.24	6.90	-32	1.14	71.0	0.64			5.25
1224	16.30	6.90	-79	1.14	74.3	0.64			6.00
1227	16.22	6.91	-114	1.13	75.5	0.61			6.75
1230	16.07	6.92	-130	1.11	81.0	0.58			7.5
1233	16.16	6.91	-130	1.16	63.4	0.61			8.25
1236	16.20	6.93	-144	1.09	55.0	0.51			9.00
1239	16.30	6.93	-152	1.08	44.1	0.51			9.75
1242	16.27	6.93	-158	1.07	34.8	0.49			10.5
1245	16.27	6.93	-161	1.07	31.2	0.54			11.25
1248	16.23	6.93	-165	1.06	24.8	0.54		✓	12.00

Total Quantity of Water Removed (gal):
Samplers: M. G. Harg, H. Bedell
Sampling Date: 06/05/23

Sampling Time: 1257
Split Sample With: X
Sample Type: GRAB

COMMENTS AND OBSERVATIONS:

WLM/DFAS: Water wheel meter is DFAS free; site wide gauging will be performed after sampling to prevent contamination

Tubing: LDPE tubing was found in wells; Tubing was removed & replaced w/ HDPE 3/8" tubing.



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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DP-17	EA Personnel: M. Gilkey / H. Badell	Client: #828199 NYSDEC (Town & Country Dry Cleaners)
Location: Brighton, NY	Well Condition: Good	Weather: 72°F; Sun; 7mph NNW; Air Index: Bad
Sounding Method: See Comments - Heron WLM	Gauge Date: 6/6/23	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1600	Well Diameter (in): 1" PVC

Purge Date: 6/5/23	Purge Time: 1250
Purge Method: Low flow - Perri Pump	Field Technician: M. Gilkey / H. Badell

Well Volume

A. Well Depth (ft): 16.29	D. Well Volume (ft): 1.08	Depth/Height of Top of PVC: 15.21
B. Depth to Water (ft): 7.50	E. Well Volume (gal) C*D): 0.359	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 8.79	F. Three Well Volumes (gal) (E3): 1.08	Pump Intake Depth: mid screen (u 15' b TOC)

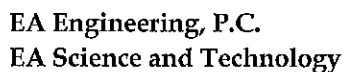
Water Quality Parameters

Time (hrs)	Temperature (oC)	pH (pH units)	ORP (mV)	Conductivity (S/m)	Turbidity (ntu)	DO (mg/L)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1251	19.53	6.49	233	3.01	1000*	2.52	*	0.25	0
1254	18.46	6.40	233	3.07	1000*	1.56	*		1.25
1257	17.76	6.35	232	3.10	1000*	1.22	*		2.50
1300	17.77	6.34	230	3.10	789	1.00	*		3.75
1303	17.93	6.34	228	3.08	401	0.98	*		5.00
1306	17.81	6.33	226	3.09	259	0.91	*		6.25
1309	18.10	6.34	223	3.08	323	0.86	*		7.5
1312	17.96	6.34	222	3.08	280	0.86	*		8.75
1315	18.11	6.38	222	3.08	166	0.99	*		10.00
1318	18.70	6.41	222	3.05	78.0	1.22	*		11.25
1321	18.50	6.37	221	3.08	283	0.89	*		12.5
1324	18.10	6.36	220	3.11	655	0.85	*		13.75
1327	17.71	6.35	219	3.15	282	0.78	*		15.00
1330	17.56	6.35	218	3.17	218	0.78	*		16.25
1333	17.46	6.35	217	3.18	134	0.75	*		17.50
1336	17.55	6.35	216	3.19	55.9	0.75	*		18.75
1339	17.74	6.35	215	3.17	54.7	0.74	*		20.00

Total Quantity of Water Removed (gal): 20.00	Sampling Time: 1354
Samplers: M. Gilkey / H. Badell	Split Sample With: GRAB
Sampling Date: 6/5/23	Sample Type: GRAB

COMMENTS AND OBSERVATIONS:

- DTW/Sounding = PFAS sampling required @ well; Heron WLM are 0 PFAS free; Site wide groundwater will occur after sampling event.
- Turbidity = 1000
- 1/4" OD LDPE Tubing was found in well when opened; This tubing is no longer recommended for PFAS sampling - tubing was removed & disposed of



COMMENTS AND OBSERVATIONS: See page 1

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: 1.75	EA Personnel: P. Beadell, C. Zook	Client: NYSDEC - Town & Country (828149)
Location: Brighton, NY	Well Condition: Good	Weather: 60 F. Cloudy
Sounding Method: Heron WLM	Gauge Date: 6/6/23	Measurement Ref: Toc
Stick Up/Down (ft): Flush	Gauge Time: 1600	Well Diameter (in): 2

Purge Date: 06/05/23	Purge Time: 1420
Purge Method: low Flo	Field Technician: H. Badell, C. Zook

Well Volume

A. Well Depth (ft): 22.49	D. Well Volume (ft): —	Depth/Height of Top of PVC: —
B. Depth to Water (ft): 5.00	E. Well Volume (gal) C*D): 2.85	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 17.49	F. Three Well Volumes (gal) (E3): 8.56	Pump Intake Depth: Mid-screen (~8' b.t.c)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):	Sampling Time:
Samplers: H. Beiden, C. Zook	Split Sample With:
Sampling Date: 06/05/23	Sample Type: GRAB

COMMENTS AND OBSERVATIONS:

WLM/ PFAS: WLM is ϕ PFAS free; Site wide gauging event will take place after sampling to prevent contamination

Tubing: LDPE tubing was found in well; tubing was removed & replaced w/ HDPE tubing



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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: <u>MW-17B</u>	EA Personnel: <u>M. Gulkay/H. Bedell</u>	Client: <u>NYSDEC # 828149</u> <u>NYSDEC (Town & Country Dry Cleaners)</u>
Location: <u>Brighton, NY</u>	Well Condition: <u>OK</u>	Weather: <u>74°F; Sun; 8 mph NNW; Air Quality ↓</u>
Sounding Method: <u>Heron Skinny Dipper WLI</u>	Gauge Date: <u>06/06/23</u>	Measurement Ref:
Stick Up/Down (ft): <u>Flush</u>	Gauge Time: <u>1000</u>	Top of Casing (TOC)
	PID Headspace Reading: <u>0.1 ppm</u>	Well Diameter (in): <u>2" PVC</u>

Purge Date: <u>6/5/23</u>	Purge Time: <u>1420</u>
Purge Method: <u>Low Flow via Peristaltic Pump</u>	Field Technician: <u>M. Gulkay/H. Bedell</u>

Well Volume

A. Well Depth (ft): <u>27.20</u>	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): <u>7.43</u>	E. Well Volume (gal) (C*D): <u>3.22</u>	Pump Type: <u>Peristaltic Pump</u>
C. Liquid Depth (ft) (A-B): <u>19.77</u>	F. Three Well Volumes (gal) (E3): <u>9.67</u>	Pump Intake Depth: <u>NA via screen ~ 20'</u>

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu) (✓)	DO (✓) (mg/L)	Temperature (°C)	ORP (✓) (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1428	7.28	0.686	355	2.49	22.05	-157	✓	0.25	0
1431	6.87	0.665	288	0.99	21.25	-132	✗		1.25
1434	6.77	0.650	252	0.84	21.01	-142	✗		2.5
1437	6.73	0.673	240	0.83	20.67	-146	✗		3.75
1440	6.71	0.726	229	0.83	20.58	-151	✗		5.0
1443	6.70	0.757	220	0.83	20.54	-154	✗		6.25
1446	6.70	0.770	210	0.82	20.54	-155	✗		7.50
1449	6.82	0.496	113	0.70	19.88	-158	✗		8.75
1452	6.79	0.484	107	0.61	20.15	-149	✗		10.0
1455	6.67	0.771	101	0.73	20.00	-153	✗		11.25
1458	6.69	0.814	94.5	0.93	19.31	-157	✗		12.5
1501	Florida battery issue								13.75
1504	6.80	0.832	27.1	0.99	20.34	-137			15.00
1507	6.72	0.841	27.7	0.92	20.18	-149			16.25
1510	6.71	0.843	25.8	0.88	20.15	-152			17.50
1513	6.71	0.843	25.5	0.87	20.34	-153			18.75

Total Quantity of Water Removed (gal):	Sampling Time: <u>1513</u>
Samplers: <u>M. Gulkay/H. Bedell</u>	Split Sample With: <u>MS/MSD</u>
Sampling Date: <u>06/05/23</u>	Sample Type: <u>GW Grab</u>

COMMENTS AND OBSERVATIONS:

- WLM/PEAS: Water level meter is PEAS free; Site wide gauging will occur after sampling to prevent contamination
- Tubing: LDPE tubing was found in well; tubing was removed & replaced w/ HDPE 3/8" tubing

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DP-19	EA Personnel: M. Gilkey / H. Bedell	Client: NYSDEC (Taxon & Country 828149)
Location: Rochester, NY	Well Condition: Good	Weather: 60°F; Sunny
Sounding Method: see Notes	Gauge Date: 06/06/23	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1000	Well Diameter (in): 2"

Purge Date: 06/05/23	Purge Time: 1209
Purge Method: Low flow - perri pump	Field Technician: M. Gilkey

Well Volume

A. Well Depth (ft): 9.42	D. Well Volume (ft): 0.2	Depth/Height of Top of PVC: 1.5
B. Depth to Water (ft): 4.50	E. Well Volume (gal) C*D): 0.6	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 4.92	F. Three Well Volumes (gal) (E3): 1.8	Pump Intake Depth: 18" (mid-screen)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):	_____	Sampling Time:	0848
Samplers:	H. Bedell	Split Sample With:	_____
Sampling Date:	06/06/23	Sample Type:	SPAB

COMMENTS AND OBSERVATIONS:

- PTW/Sounding method: PFAS sampling - Heronholm one of PFAS free; waterline measurements are taken site-wide after sampling.
- Turbidity: 1000 flashing - turbidity was over panel Heron could read
- Tubing found in well (LDPE 1/4" OD) was removed & replaced

GROUNDWATER SAMPLING PURGE FORM

Well ID: MW-3	EA Personnel: H. Bedell, C. Zook	Client: NYS DEC
Location: Grantham, NY	Well Condition: Good	Weather: 60°F, partly cloudy
Sounding Method: Heron WLM*	Gauge Date: 6/6/23	Measurement Ref: TOC
Stick Up/Down (ft): FLUSH	Gauge Time: 1000	Well Diameter (in): 4

Purge Date: 06/06/23	Purge Time: 0840
Purge Method: LOW FLO	Field Technician: H. Beadell, C. Zook

Well Volume

A. Well Depth (ft): 7.63	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 4.10	E. Well Volume (gal) C*D): 2.30	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 3.53	F. Three Well Volumes (gal) (E3): 6.91	Pump Intake Depth: mid-screen (~ 8ft-btOC)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):		Sampling Time:	0900
Samplers:	H. Bedell, C. Woot	Split Sample With:	X
Sampling Date:	06/06/23	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

COMMENTS AND OBSERVATIONS: *PFAS Sampling: WLM is of PFAS free to prevent contamination a site wide change will occur after sampling is complete. Tubing was found in well (HOPE 1/4") which is of recommended for PFAS sampling. tubing was removed & replaced w/ HOPE 3/8"

GROUNDWATER SAMPLING PURGE FORM

Well F.D.: <u>GEMW-2</u>	EA Personnel: <u>H. Bedell, C. Zook</u>	Client: <u>NYSDEC</u>
Location: <u>Brighton, NY</u>	Well Condition: <u>good</u>	Weather: <u>LD F Cloudy</u>
Sounding Method:	Gauge Date: <u>6/6/23</u>	Measurement Ref: <u>TOC</u>
Stick Up/Down (ft): <u>Flush</u>	Gauge Time: <u>1600</u>	Well Diameter (in): <u>14</u>

Purge Date: 06/05/23	Purge Time: 1335
Purge Method: Low Flo	Field Technician: P. Stull, C. Zook

Well Volume

A. Well Depth (ft): 17.31	D. Well Volume (ft): 0.290	Depth/Height of Top of PVC: Pump Type: Peristaltic Pump
B. Depth to Water (ft): 7.20	E. Well Volume (gal) C*D): 0.87	Pump Intake Depth: Mid Screen (w/ 13ft b TOC)
C. Liquid Depth (ft) (A-B): 7.11	F. Three Well Volumes (gal) (E3): 0.87	

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):	5.04	Sampling Time:	0953
Samplers:	M. GILLEY	Split Sample With:	X
Sampling Date:	06/06/23	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

COMMENTS AND OBSERVATIONS: ^oPFAS Sampling: WLM is ~~not~~ PFAS free; Site wide gauging event will occur after sampling to prevent contamination
Tubing: 1/4" LDPE tubing found in well (recommended for PFAS); Tubing was removed & replaced w/ 3/8" HDPE

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: DP-20	BA Personnel: H. Beckett, C. Zook	Client: NYSDEC
Location: Brighton	Well Condition: good	Weather: LW F partly cloudy
Sounding Method: Heron w/m	Gauge Date: ~~1600~~ 06/06	Measurement Ref: TIC
Stick Up/Down (ft): Flush	Gauge Time: 1600	Well Diameter (in): 1

Purge Date: 06/06/23	Purge Time: ~~1033~~ 1033
Purge Method: Low Flo	Field Technician: H. Bedell, C. Zook

Well Volume

A. Well Depth (ft): 14.78	D. Well Volume (ft): /	Depth/Height of Top of PVC: /
B. Depth to Water (ft): 11.97	E. Well Volume (gal) C*D): 0.11	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 2.81	F. Three Well Volumes (gal) (E3): 0.34	Pump Intake Depth: mid screen / u 12ft + b Top

Water Quality Parameters

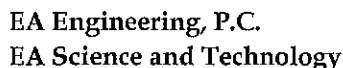
[illegible]

Total Quantity of Water Removed (gal):	Sampling Time:
Samplers: H. Bedell, C. Zook	Split Sample With: ☒
Sampling Date:	Sample Type: GRIAB

COMMENTS AND OBSERVATIONS:
Open excavation of sanitary sewer ~ 10 feet from well

PFAS Sampling: WLMs are $\neq$ PFAS free; to ~~to~~ avoid contamination a sitewide gauging event will occur after sampling

tubing: LDPE tubing was found in well; This was removed & replaced w/
3/8" HDPE tubing



Well I.D.: DP-19	EA Personnel: M. Gubek / H. Bedell	Client: NYSDEC (Team \$Country Dry Cleaners)
Location: Brighton, NY	Well Condition: GOOD	Weather: 65°F; Cloudy; 10mph NNW; 29.79" Hg
Sounding Method: Heron Skinny Dipper WLI	Gauge Date: 06/06/23	Measurement Ref:
Stick Up/Down (ft): Flush	Gauge Time: 1600	Top of Casing (TOC)
	PID Headspace Reading: 0.0	Well Diameter (in): 1" PVC

Purge Date: 06/06/23	Purge Time: 1103
Purge Method: Low Flow via Peristaltic Pump	Field Technician: M. Culkey / H. Bedeep

A. Well Depth (ft): 12.91	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 5.56	E. Well Volume (gal) (C*D): 0.300	Pump Type: Peristaltic Pump
C. Liquid Depth (ft) (A-B): 7.35	F. Three Well Volumes (gal) (E*3): 0.900	Pump Intake Depth: ~~12~~ mid screen (u 9ft-b to c)

[illegible]

Total Quantity of Water Removed (gal):	Sampling Time:
Samplers: M-Gulkey/H. Bertell	Split Sample With: ∞
Sampling Date: 6/6/23	Sample Type: GW Grab

COMMENTS AND OBSERVATIONS: ¹⁶ PFAS Sampling: WLM is ~~not~~ PFAS free; to avoid cross contamination a site wide gauging event will occur after sampling

- 1000% NTL: Turbidity level is over what Honda can meet
- Tubing was found in well (LDPF) & was removed & replaced w/ 3/8" LDPF tubing for PFAS Sampling

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-19B	EA Personnel: M. Gilkey/H. Bedell	Client: NYSDEC (Town & Country 828199)
Location: Brighton, NY	Well Condition: Good	Weather: 63°F; Cloudy; 10 mph NAW
Sounding Method: Heron WLM	Gauge Date: 6/6/23	Measurement Ref: TOC PVC
Stick Up/Down (ft): Flush	Gauge Time: 1600	Well Diameter (in): 2" PVC

Purge Date: 6/6/23	Purge Time: 1152
Purge Method: Low flow Perri Pump	Field Technician: M. Gilkey / H. Bedell

Well Volume

A. Well Depth (ft): 21.00	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 5.63	E. Well Volume (gal) C*D): 2.51	Pump Type: Derristatic
C. Liquid Depth (ft) (A-B): 15.37	F. Three Well Volumes (gal) (E3): 7.52	Pump Intake Depth: Mid screen (w 24 ft b TOC)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):	Sampling Time:	1223
Samplers: M. G. Key / H. Bedell	Split Sample With:	X
Sampling Date: 6/6/23	Sample Type:	GRAB

COMMENTS AND OBSERVATIONS:

COMMENTS AND OBSERVATIONS: Water level: PNAS sampling; WLM is of PNAS free, a
site wide gauging event will take place after sampling to prevent ~~the~~ contamination of PNAS
o Tubing found in well (LDPE 1/4") was removed & replaced w/ 3/8" HDPE

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-21B	EA Personnel: M. Bedell, C Zook	Client: NYSDEC
Location: Brighton, NY	Well Condition: good	Weather: 60° hazy
Sounding Method: Heron w/m	Gauge Date: 6/16/23	Measurement Ref: TDC
Stick Up/Down (ft): Flash	Gauge Time: 1600	Well Diameter (in): 2 1/2

Purge Date: 06/06/23	Purge Time: 1209
Purge Method: Low Flo	Field Technician: H. Bedell, C. Zook

Well Volume

A. Well Depth (ft): 19.48	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 8.31	E. Well Volume (gal) C*D): 1.82	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 11.17	F. Three Well Volumes (gal) (E3): 5.47	Pump Intake Depth: mid screen (w 18" + 6" TOC)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):	Sampling Time:
Samplers: H. Ballell, C. Zook	Split Sample With: X
Sampling Date: 06/06/23	Sample Type: C&RAB

COMMENTS AND OBSERVATIONS:

- COMMENTS AND OBSERVATIONS:
- Air Quality (aqi) high due to wildfire in Canada (~120)
 - Water level: Well done & PEAS free; to prevent contamination site wide gauging will occur after sampling
 - Tubing was found in well (LDPE) & was removed & replaced w/ HDPE tubing

GROUNDWATER SAMPLING PURGE FORM

Well ID: DP-18	EA Personnel: H. Bell, C. Zook, M. Grille	Client: NYSDEC
Location: Brighton, NY	Well Condition: Good	Weather: 60°F Partly cloudy
Sounding Method: Heron wlm	Gauge Date: 06/06/23	Measurement Ref: T.C.
Stick Up/Down (ft): Flush	Gauge Time: 1600	Well Diameter (in): 1

Purge Date: 06/06/23	Purge Time: 1009
Purge Method: LOW FLO	Field Technician: H. Bedell, C. Zask

Well Volume

A. Well Depth (ft): 10.27	D. Well Volume (ft): 	Depth/Height of Top of PVC:
B. Depth to Water (ft): 6.88	E. Well Volume (gal) C*D): 0.138	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 3.39	F. Three Well Volumes (gal) (E3): 0.419	Pump Intake Depth: mid screen (w/ 4 b TOC)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):	Sampling Time:	1505
Samplers: M. G. Kory, H. Beckett	Split Sample With:	X
Sampling Date: 6/6/83	Sample Type:	GROB

COMMENTS AND OBSERVATIONS:

- PFAS: WLM is ~~of~~ PFAS free; site wide gauging will occur after sampling to prevent contamination
- LDPE Tubing found in well; removed & replaced w/ HDPE tubing
- Well will be sampled upon recharge
- Turbidity: Horiba can ~~of~~ read NTU above 1000

GROUNDWATER SAMPLING PURGE FORM

Well ID.: IX-21	EA Personnel: H. Baugh, C. Zook	Client: NYS DEC
Location: Brighton, NY	Well Condition: good	Weather: 60°F hazy
Sounding Method: Heron WLM	Gauge Date: 6/6/23	Measurement Ref.: TOC
Stick Up/Down (ft): Flush	Gauge Time: 1600	Well Diameter (in): 1

Purge Date: 06/06/23	Purge Time: 1451
Purge Method: Low Flo	Field Technician: H. Beadell, C. Zook

Well Volume

A. Well Depth (ft): 10.37	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 7.96	E. Well Volume (gal) C*D): 0.98	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 2.41	F. Three Well Volumes (gal) (E3): 0.295	Pump Intake Depth: Mid-screen (w/ 4 b70c)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):	Sampling Time:
Samplers: <u>H. Bedell, C. Zook</u>	Split Sample With: <u>X</u>
Sampling Date: <u>06/06/23</u>	Sample Type: <u>GRAB</u>

COMMENTS AND OBSERVATIONS:

- o PEAS/WLM: WLM is ~~not~~ PEAS free; a site wide gauging will be performed after sampling
- o Tubing: LDPE Tubing was found in well; Tubing was removed & replaced w/ HDPE 3/8"

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-08	EA Personnel: H. Bedell, C. Zook	Client: NYS DEC
Location: Brighton, NY	Well Condition: good	Weather: 60° F hazy
Sounding Method:	Gauge Date: ~~11/1/12~~ 6/6/13	Measurement Ref: TDC
Stick Up/Down (ft): Flush	Gauge Time: 14:00	Well Diameter (in): 1

Purge Date: 06/06/23	Purge Time: 0750h 1335
Purge Method: Low Flow	Field Technician: H. Beden, C. Zook

Well Volume

A. Well Depth (ft): 9.29	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 9.16	E. Well Volume (gal) C*D): 0.005	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 0.13	F. Three Well Volumes (gal) (E3): 0.015	Pump Intake Depth: Bottom of Screen (19-10 ft)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):	_____	Sampling Time:	_____
Samplers:	_____	Split Sample With:	_____
Sampling Date:	_____	Sample Type:	_____

COMMENTS AND OBSERVATIONS:

well & sampled; completely dry

GROUNDWATER SAMPLING PURGE FORM

Well ID.: MW-10	EA Personnel: M. Wilkey / H. Bedell	Client: NYSDEC (Town & Country #82811)
Location: Brighton, NY	Well Condition: Good / Dry	Weather: 46.3°F, Sun / Wind: 10 mph NW
Sounding Method: Heron WLM	Gauge Date: 6/6/23	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time: 13	Well Diameter (in): 1" PVC

Purge Date:	6/6/23	Purge Time:	1345
Purge Method:	low flow - Perri	Field Technician:	McAnkey / H. Bedell

Well Volume

A. Well Depth (ft): 9.54	D. Well Volume (ft):	Depth/Height of Top of PVC:
B. Depth to Water (ft): 9.21	E. Well Volume (gal) C*D): 0.013	Pump Type: Peristaltic
C. Liquid Depth (ft) (A-B): 0.33	F. Three Well Volumes (gal) (E*3): 0.040	Pump Intake Depth: Bottom of screen (upper part)

Water Quality Parameters

[illegible]

Total Quantity of Water Removed (gal):	_____	Sampling Time:	_____
Samplers:	_____	Split Sample With:	_____
Sampling Date:	_____	Sample Type:	_____

COMMENTS AND OBSERVATIONS:

Well sampled; completely d.h.

Appendix B

Site Inspection Forms

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Site Inspection Checklist

Site Name (Number): Town and Country (828149)

Date/Time: 3/31/23 11:45 AM
- 12:05 PM

Site Address (nearest cross street): 2308 & 2310 Monroe Ave. Brighton, NY 14618

Weather: 40°F, overcast/cloudy
Personnel: N. Peck
N. Robinson
J. Oliver

Site property description (e.g, buildings, fencing, gates, etc)

Building(s): 1 Stories: 1 In Use/Active: not active - dry cleaners

Bldg material: brick/cinder block Area Use (R/C/I): R/C

Fenced (Y/N) (material): NO Gate(s): N/A Lock(s): N/A

Nearest adjacent buildings (and descriptions):
nail salon, food market, bead store, residential houses

Site Surface Hydrology

Surface water drainage/Impoundments: N/A Creeks/Streams: N/A

Ponds/Water front N/A

Site Features

Asphalt/Concrete (%): 50% Condition: good (few spots of broken asphalt)

Slope/Direction (steep/flat, hilly, etc.) flat

Vegetation (grassy/trees/shrubs; overgrown, etc.) overgrown, trees behind residential prop

Overhead Utilities (electric/data/phone): yes, on site boundary

Subsurface Utilities and Locations: unknown

Monitoring Wells (see attached checklist).

Notes/Other Observations:

Site Sketch

see attached

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Appendix C

Laboratory and Data Validation Reports

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June 23, 2023

Moriah Gilkey
NYDEC_EA Engineering, Science & Tech. - NY
269 West Jefferson St.
Syracuse, NY 13202

Project Location: Brighton, NY
Client Job Number:
Project Number: 828149
Laboratory Work Order Number: 23F0711

Enclosed are results of analyses for samples as received by the laboratory on June 7, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle K. Stuckey
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332NYDEC_EA Engineering, Science & Tech. - NY
269 West Jefferson St.
Syracuse, NY 13202
ATTN: Moriah Gilkey

REPORT DATE: 6/23/2023

PURCHASE ORDER NUMBER: 147421

PROJECT NUMBER: 828149

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F0711

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Brighton, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
828149-MW-13	23F0711-01	Ground Water		Draft Method 1633	
828149-MW-13B	23F0711-02	Ground Water		Draft Method 1633	
828149-MW-2	23F0711-03	Ground Water		Draft Method 1633	
828149-MW-17B	23F0711-04	Ground Water		Draft Method 1633	
828149-DP-17	23F0711-05	Ground Water		Draft Method 1633	
828149-FD-01	23F0711-06	Ground Water		Draft Method 1633	
828149-FB-01	23F0711-07	Field Blank		Draft Method 1633	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Draft Method 1633**Qualifications:**

PF-18

Duplicate analysis confirmed Extracted Internal Standard failure due to matrix effects.

Analyte & Samples(s) Qualified:**13C4-PFBA**

23F0711-05[828149-DP-17]

Perfluorobutanoic acid (PFBA)

23F0711-05[828149-DP-17]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-13

Sampled: 6/5/2023 11:32

Sample ID: 23F0711-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	16	4.1	1.5	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluoropentanoic acid (PFPeA)	5.5	2.0	0.35	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorohexanoic acid (PFHxA)	4.5	1.0	0.22	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluoroheptanoic acid (PFHpA)	2.8	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorooctanoic acid (PFOA)	10	1.0	0.23	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorononanoic acid (PFNA)	0.22	1.0	0.20	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorobutanesulfonic acid (PFBS)	4.0	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluoropentanesulfonic acid (PFPeS)	0.64	1.0	0.24	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorohexanesulfonic acid (PFHxS)	2.2	1.0	0.21	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorooctanesulfonic acid (PFOS)	12	1.0	0.32	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.1	0.71	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.1	1.0	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	0.42	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.45	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.5	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.1	0.70	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.1	0.87	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
11Cl-PF3OUDs (F53B Major)	ND	4.1	0.99	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.8	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	51	10	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	9.0	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.50	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.51	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-13

Sampled: 6/5/2023 11:32

Sample ID: 23F0711-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.41	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.88	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:21	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	31.5		10-130				6/15/23 22:21			
13C5-PFPeA	85.8		35-150				6/15/23 22:21			
13C5-PFHxA	89.2		55-150				6/15/23 22:21			
13C4-PFHpA	86.2		55-150				6/15/23 22:21			
13C8-PFOA	87.2		60-140				6/15/23 22:21			
13C9-PFNA	82.6		55-140				6/15/23 22:21			
13C6-PFDA	86.9		50-140				6/15/23 22:21			
13C7-PFUnA	80.1		30-140				6/15/23 22:21			
13C2-PFDoA	75.8		10-150				6/15/23 22:21			
13C2-PFTeDA	76.1		10-130				6/15/23 22:21			
13C3-PFBS	89.4		55-150				6/15/23 22:21			
13C3-PFHxS	86.6		55-150				6/15/23 22:21			
13C8-PFOS	85.7		45-140				6/15/23 22:21			
13C2-4:2FTS	109		60-200				6/15/23 22:21			
13C2-6:2FTS	97.0		60-200				6/15/23 22:21			
13C2-8:2FTS	90.7		50-200				6/15/23 22:21			
13C8-PFOSA	78.7		30-130				6/15/23 22:21			
D3-NMeFOSA	62.8		15-130				6/15/23 22:21			
D5-NEtFOSA	61.3		10-130				6/15/23 22:21			
D3-NMeFOSAA	79.6		45-200				6/15/23 22:21			
D5-NEtFOSAA	76.7		10-200				6/15/23 22:21			
D7-NMeFOSE	82.9		10-150				6/15/23 22:21			
D9-NEtFOSE	81.0		10-150				6/15/23 22:21			
13C3-HFPO-DA	92.1		25-160				6/15/23 22:21			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-13

Sampled: 6/5/2023 11:32

Sample ID: 23F0711-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	6/8/23	6/8/23 13:19	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-13B

Sampled: 6/5/2023 12:57

Sample ID: 23F0711-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.3	4.0	1.4	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluoropentanoic acid (PFPeA)	0.37	2.0	0.35	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorohexanoic acid (PFHxA)	0.31	0.99	0.21	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.99	0.25	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorooctanoic acid (PFOA)	ND	0.99	0.22	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorononanoic acid (PFNA)	ND	0.99	0.19	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorodecanoic acid (PFDA)	ND	0.99	0.18	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.99	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.99	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	0.25	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.99	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	0.24	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.99	0.20	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	0.30	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.99	0.32	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.69	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	0.98	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.99	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.99	0.41	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.99	0.44	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.99	0.22	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.9	2.6	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	2.4	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.68	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.85	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.0	0.96	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	1.8	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	10	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	8.8	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-13B

Sampled: 6/5/2023 12:57

Sample ID: 23F0711-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.40	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.86	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:37	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	51.2		10-130				6/15/23 22:37			
13C5-PFPeA	89.5		35-150				6/15/23 22:37			
13C5-PFHxA	89.8		55-150				6/15/23 22:37			
13C4-PFHpA	87.5		55-150				6/15/23 22:37			
13C8-PFOA	91.0		60-140				6/15/23 22:37			
13C9-PFNA	91.8		55-140				6/15/23 22:37			
13C6-PFDA	86.7		50-140				6/15/23 22:37			
13C7-PFUnA	82.3		30-140				6/15/23 22:37			
13C2-PFDoA	77.5		10-150				6/15/23 22:37			
13C2-PFTeDA	78.5		10-130				6/15/23 22:37			
13C3-PFBS	88.3		55-150				6/15/23 22:37			
13C3-PFHxS	88.0		55-150				6/15/23 22:37			
13C8-PFOS	85.8		45-140				6/15/23 22:37			
13C2-4:2FTS	85.1		60-200				6/15/23 22:37			
13C2-6:2FTS	95.9		60-200				6/15/23 22:37			
13C2-8:2FTS	94.1		50-200				6/15/23 22:37			
13C8-PFOSA	79.9		30-130				6/15/23 22:37			
D3-NMeFOSA	58.3		15-130				6/15/23 22:37			
D5-NEtFOSA	56.9		10-130				6/15/23 22:37			
D3-NMeFOSAA	78.3		45-200				6/15/23 22:37			
D5-NEtFOSAA	80.0		10-200				6/15/23 22:37			
D7-NMeFOSE	69.1		10-150				6/15/23 22:37			
D9-NEtFOSE	68.1		10-150				6/15/23 22:37			
13C3-HFPO-DA	90.6		25-160				6/15/23 22:37			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-13B

Sampled: 6/5/2023 12:57

Sample ID: 23F0711-02

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	6/8/23	6/8/23 13:19	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-2

Sampled: 6/5/2023 14:55

Sample ID: 23F0711-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	4.0	4.0	1.4	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluoropentanoic acid (PFPeA)	0.68	2.0	0.35	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorohexanoic acid (PFHxA)	0.36	1.0	0.21	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluoroheptanoic acid (PFHpA)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorooctanoic acid (PFOA)	0.27	1.0	0.22	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.18	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorobutanesulfonic acid (PFBS)	1.5	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.24	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.70	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	0.98	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	0.41	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.44	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.22	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	2.6	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.4	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.69	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.85	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
11Cl-PF3OUDs (F53B Major)	ND	4.0	0.97	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.8	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	50	10	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	8.8	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.50	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-2

Sampled: 6/5/2023 14:55

Sample ID: 23F0711-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.40	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.86	ng/L	1		Draft Method 1633	6/12/23	6/15/23 22:53	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	30.1		10-130				6/15/23 22:53			
13C5-PFPeA	89.4		35-150				6/15/23 22:53			
13C5-PFHxA	89.5		55-150				6/15/23 22:53			
13C4-PFHpA	87.7		55-150				6/15/23 22:53			
13C8-PFOA	85.9		60-140				6/15/23 22:53			
13C9-PFNA	87.4		55-140				6/15/23 22:53			
13C6-PFDA	90.8		50-140				6/15/23 22:53			
13C7-PFUnA	86.4		30-140				6/15/23 22:53			
13C2-PFDoA	86.7		10-150				6/15/23 22:53			
13C2-PFTeDA	87.1		10-130				6/15/23 22:53			
13C3-PFBS	90.4		55-150				6/15/23 22:53			
13C3-PFHxS	89.5		55-150				6/15/23 22:53			
13C8-PFOS	90.7		45-140				6/15/23 22:53			
13C2-4:2FTS	85.3		60-200				6/15/23 22:53			
13C2-6:2FTS	99.7		60-200				6/15/23 22:53			
13C2-8:2FTS	102		50-200				6/15/23 22:53			
13C8-PFOSA	81.0		30-130				6/15/23 22:53			
D3-NMeFOSA	60.9		15-130				6/15/23 22:53			
D5-NEtFOSA	63.6		10-130				6/15/23 22:53			
D3-NMeFOSAA	80.4		45-200				6/15/23 22:53			
D5-NEtFOSAA	86.6		10-200				6/15/23 22:53			
D7-NMeFOSE	70.4		10-150				6/15/23 22:53			
D9-NEtFOSE	70.6		10-150				6/15/23 22:53			
13C3-HFPO-DA	89.8		25-160				6/15/23 22:53			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-2

Sampled: 6/5/2023 14:55

Sample ID: 23F0711-03

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	6/8/23	6/8/23 13:19	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-17B

Sampled: 6/5/2023 15:13

Sample ID: 23F0711-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	1.5	4.0	1.4	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorohexanoic acid (PFHxA)	ND	1.0	0.22	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluoroheptanoic acid (PFHpA)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorooctanoic acid (PFOA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.18	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorobutanesulfonic acid (PFBS)	0.41	1.0	0.26	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.24	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.70	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	0.99	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	0.41	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.44	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.22	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	2.6	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.4	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.69	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.85	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
11Cl-PF3OUDs (F53B Major)	ND	4.0	0.97	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.8	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	50	10	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	8.8	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.50	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-17B

Sampled: 6/5/2023 15:13

Sample ID: 23F0711-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.40	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.86	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:08	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	46.2		10-130				6/15/23 23:08			
13C5-PFPeA	95.4		35-150				6/15/23 23:08			
13C5-PFHxA	95.6		55-150				6/15/23 23:08			
13C4-PFHpA	94.0		55-150				6/15/23 23:08			
13C8-PFOA	88.3		60-140				6/15/23 23:08			
13C9-PFNA	92.0		55-140				6/15/23 23:08			
13C6-PFDA	87.5		50-140				6/15/23 23:08			
13C7-PFUnA	79.8		30-140				6/15/23 23:08			
13C2-PFDoA	73.8		10-150				6/15/23 23:08			
13C2-PFTeDA	72.5		10-130				6/15/23 23:08			
13C3-PFBS	90.8		55-150				6/15/23 23:08			
13C3-PFHxS	92.5		55-150				6/15/23 23:08			
13C8-PFOS	86.8		45-140				6/15/23 23:08			
13C2-4:2FTS	85.3		60-200				6/15/23 23:08			
13C2-6:2FTS	91.5		60-200				6/15/23 23:08			
13C2-8:2FTS	89.8		50-200				6/15/23 23:08			
13C8-PFOSA	77.1		30-130				6/15/23 23:08			
D3-NMeFOSA	56.5		15-130				6/15/23 23:08			
D5-NEtFOSA	55.8		10-130				6/15/23 23:08			
D3-NMeFOSAA	74.9		45-200				6/15/23 23:08			
D5-NEtFOSAA	74.3		10-200				6/15/23 23:08			
D7-NMeFOSE	61.6		10-150				6/15/23 23:08			
D9-NEtFOSE	60.5		10-150				6/15/23 23:08			
13C3-HFPO-DA	96.9		25-160				6/15/23 23:08			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-MW-17B

Sampled: 6/5/2023 15:13

Sample ID: 23F0711-04

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	22	10	mg/L	1		Draft Method 1633	6/8/23	6/8/23 13:19	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-DP-17

Sampled: 6/5/2023 13:54

Sample ID: 23F0711-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	6.0	3.9	1.4	ng/L	1	PF-18	Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluoropentanoic acid (PFPeA)	0.89	2.0	0.34	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorohexanoic acid (PFHxA)	0.47	0.98	0.21	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluoroheptanoic acid (PFHpA)	0.36	0.98	0.25	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorooctanoic acid (PFOA)	0.68	0.98	0.22	ng/L	1	J	Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorononanoic acid (PFNA)	ND	0.98	0.19	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorodecanoic acid (PFDA)	ND	0.98	0.18	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.98	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.98	0.25	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.98	0.27	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.98	0.25	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorobutanesulfonic acid (PFBS)	3.4	0.98	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	0.23	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.98	0.20	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	0.30	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.98	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.98	0.29	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	0.31	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.98	0.26	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.68	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	0.97	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.98	0.30	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.98	0.41	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.98	0.30	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.98	0.43	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.98	0.22	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.8	2.6	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.8	2.4	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.67	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.84	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
11Cl-PF3OUDs (F53B Major)	ND	3.9	0.95	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.8	1.8	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	10	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
3-Perfluoroheptyl propanoic acid (FHPrPA) (7:3FTCA)	ND	49	8.6	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.48	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-DP-17

Sampled: 6/5/2023 13:54

Sample ID: 23F0711-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.39	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.85	ng/L	1		Draft Method 1633	6/12/23	6/15/23 23:24	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	4.06	*	10-130		PF-18			6/15/23	23:24	
13C5-PFPeA	77.5		35-150					6/15/23	23:24	
13C5-PFHxA	84.2		55-150					6/15/23	23:24	
13C4-PFHpA	81.7		55-150					6/15/23	23:24	
13C8-PFOA	78.0		60-140					6/15/23	23:24	
13C9-PFNA	78.7		55-140					6/15/23	23:24	
13C6-PFDA	80.3		50-140					6/15/23	23:24	
13C7-PFUnA	76.0		30-140					6/15/23	23:24	
13C2-PFDoA	71.6		10-150					6/15/23	23:24	
13C2-PFTeDA	70.2		10-130					6/15/23	23:24	
13C3-PFBS	85.8		55-150					6/15/23	23:24	
13C3-PFHxS	87.2		55-150					6/15/23	23:24	
13C8-PFOS	80.7		45-140					6/15/23	23:24	
13C2-4:2FTS	108		60-200					6/15/23	23:24	
13C2-6:2FTS	93.1		60-200					6/15/23	23:24	
13C2-8:2FTS	84.6		50-200					6/15/23	23:24	
13C8-PFOSA	69.1		30-130					6/15/23	23:24	
D3-NMeFOSA	54.2		15-130					6/15/23	23:24	
D5-NEtFOSA	52.3		10-130					6/15/23	23:24	
D3-NMeFOSAA	68.4		45-200					6/15/23	23:24	
D5-NEtFOSAA	69.4		10-200					6/15/23	23:24	
D7-NMeFOSE	61.0		10-150					6/15/23	23:24	
D9-NEtFOSE	60.3		10-150					6/15/23	23:24	
13C3-HFPO-DA	86.0		25-160					6/15/23	23:24	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-DP-17

Sampled: 6/5/2023 13:54

Sample ID: 23F0711-05

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	86	10	mg/L	1		Draft Method 1633	6/8/23	6/8/23 13:19	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-FD-01

Sampled: 6/5/2023 00:00

Sample ID: 23F0711-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	4.3	4.1	1.5	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluoropentanoic acid (PFPeA)	0.76	2.1	0.36	ng/L	1	J	Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorohexanoic acid (PFHxA)	0.44	1.0	0.22	ng/L	1	J	Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluoroheptanoic acid (PFHpA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorooctanoic acid (PFOA)	0.27	1.0	0.23	ng/L	1	J	Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorobutanesulfonic acid (PFBS)	1.5	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.1	0.72	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.1	1.0	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	0.43	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.46	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.5	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	4.1	0.71	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.1	0.88	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
11Cl-PF3OUs (F53B Major)	ND	4.1	1.0	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.9	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	52	11	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	52	9.1	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.1	0.51	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.1	0.52	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-FD-01

Sampled: 6/5/2023 00:00

Sample ID: 23F0711-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.1	0.42	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.1	0.90	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:11	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	49.7		10-130				6/16/23 0:11			
13C5-PFPeA	87.1		35-150				6/16/23 0:11			
13C5-PFHxA	86.3		55-150				6/16/23 0:11			
13C4-PFHpA	86.7		55-150				6/16/23 0:11			
13C8-PFOA	84.1		60-140				6/16/23 0:11			
13C9-PFNA	82.1		55-140				6/16/23 0:11			
13C6-PFDA	84.7		50-140				6/16/23 0:11			
13C7-PFUnA	80.3		30-140				6/16/23 0:11			
13C2-PFDoA	75.3		10-150				6/16/23 0:11			
13C2-PFTeDA	75.9		10-130				6/16/23 0:11			
13C3-PFBS	85.2		55-150				6/16/23 0:11			
13C3-PFHxS	85.4		55-150				6/16/23 0:11			
13C8-PFOS	82.4		45-140				6/16/23 0:11			
13C2-4:2FTS	77.8		60-200				6/16/23 0:11			
13C2-6:2FTS	79.6		60-200				6/16/23 0:11			
13C2-8:2FTS	74.9		50-200				6/16/23 0:11			
13C8-PFOSA	75.2		30-130				6/16/23 0:11			
D3-NMeFOSA	57.1		15-130				6/16/23 0:11			
D5-NEtFOSA	56.0		10-130				6/16/23 0:11			
D3-NMeFOSAA	78.1		45-200				6/16/23 0:11			
D5-NEtFOSAA	77.7		10-200				6/16/23 0:11			
D7-NMeFOSE	67.3		10-150				6/16/23 0:11			
D9-NEtFOSE	66.0		10-150				6/16/23 0:11			
13C3-HFPO-DA	87.6		25-160				6/16/23 0:11			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-FD-01

Sampled: 6/5/2023 00:00

Sample ID: 23F0711-06

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	6/8/23	6/8/23 13:19	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-FB-01

Sampled: 6/5/2023 15:55

Sample ID: 23F0711-07

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.0	1.5	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.35	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorohexanoic acid (PFHxA)	ND	1.0	0.22	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluoroheptanoic acid (PFHpA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorooctanoic acid (PFOA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.24	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	1.0	0.21	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.29	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.70	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	0.99	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	0.42	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.44	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.22	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	2.6	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.5	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.69	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.85	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
11Cl-PF3OUs (F53B Major)	ND	4.0	0.97	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.8	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	50	10	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	50	8.8	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.50	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-FB-01

Sampled: 6/5/2023 15:55

Sample ID: 23F0711-07

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.40	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.87	ng/L	1		Draft Method 1633	6/12/23	6/16/23 0:26	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	88.4		10-130				6/16/23 0:26			
13C5-PFPeA	86.8		35-150				6/16/23 0:26			
13C5-PFHxA	87.2		55-150				6/16/23 0:26			
13C4-PFHpA	85.9		55-150				6/16/23 0:26			
13C8-PFOA	82.5		60-140				6/16/23 0:26			
13C9-PFNA	83.4		55-140				6/16/23 0:26			
13C6-PFDA	87.8		50-140				6/16/23 0:26			
13C7-PFUnA	78.0		30-140				6/16/23 0:26			
13C2-PFDoA	76.5		10-150				6/16/23 0:26			
13C2-PFTeDA	76.3		10-130				6/16/23 0:26			
13C3-PFBS	87.5		55-150				6/16/23 0:26			
13C3-PFHxS	88.3		55-150				6/16/23 0:26			
13C8-PFOS	81.7		45-140				6/16/23 0:26			
13C2-4:2FTS	78.2		60-200				6/16/23 0:26			
13C2-6:2FTS	82.7		60-200				6/16/23 0:26			
13C2-8:2FTS	83.5		50-200				6/16/23 0:26			
13C8-PFOSA	70.7		30-130				6/16/23 0:26			
D3-NMeFOSA	59.4		15-130				6/16/23 0:26			
D5-NEtFOSA	58.5		10-130				6/16/23 0:26			
D3-NMeFOSAA	78.2		45-200				6/16/23 0:26			
D5-NEtFOSAA	78.2		10-200				6/16/23 0:26			
D7-NMeFOSE	67.2		10-150				6/16/23 0:26			
D9-NEtFOSE	65.5		10-150				6/16/23 0:26			
13C3-HFPO-DA	91.4		25-160				6/16/23 0:26			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0711

Date Received: 6/7/2023

Field Sample #: 828149-FB-01

Sampled: 6/5/2023 15:55

Sample ID: 23F0711-07

Sample Matrix: Field Blank

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	6/8/23	6/8/23 14:49	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data**Prep Method:**Draft Method 1633 **Analytical Method:**Draft Method 1633 **Leachates were extracted on 6/8/2023 per NO PREP in Batch B342615**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0711-01 [828149-MW-13]	B342581	489	5.00	06/12/23
23F0711-02 [828149-MW-13B]	B342581	503	5.00	06/12/23
23F0711-03 [828149-MW-2]	B342581	501	5.00	06/12/23
23F0711-04 [828149-MW-17B]	B342581	501	5.00	06/12/23
23F0711-05 [828149-DP-17]	B342581	510	5.00	06/12/23
23F0711-06 [828149-FD-01]	B342581	483	5.00	06/12/23
23F0711-07 [828149-FB-01]	B342581	499	5.00	06/12/23

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
23F0711-01 [828149-MW-13]	B342615	50.0	06/08/23
23F0711-02 [828149-MW-13B]	B342615	50.0	06/08/23
23F0711-03 [828149-MW-2]	B342615	50.0	06/08/23
23F0711-04 [828149-MW-17B]	B342615	50.0	06/08/23
23F0711-05 [828149-DP-17]	B342615	50.0	06/08/23
23F0711-06 [828149-FD-01]	B342615	50.0	06/08/23

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
23F0711-07 [828149-FB-01]	B342706	50.0	06/08/23

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342581 - Draft Method 1633										
Blank (B342581-BLK1)				Prepared: 06/12/23 Analyzed: 06/15/23						
Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	1.9	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.97	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.97	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.97	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.97	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.97	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.97	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.97	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.97	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.97	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.97	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.97	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.97	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.97	ng/L							
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.97	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.97	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.97	ng/L							
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.7	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	3.9	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	3.9	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.7	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND	1.9	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	ng/L							
Surrogate: 13C4-PFBA	49.5		ng/L	48.6		102	10-130			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342581 - Draft Method 1633
Blank (B342581-BLK1)

Prepared: 06/12/23 Analyzed: 06/15/23

Surrogate: 13C5-PFPeA	24.6		ng/L	24.3		101	35-150			
Surrogate: 13C5-PFHxA	12.3		ng/L	12.2		101	55-150			
Surrogate: 13C4-PFHpA	12.2		ng/L	12.2		100	55-150			
Surrogate: 13C8-PFOA	12.2		ng/L	12.2		100	60-140			
Surrogate: 13C9-PFNA	5.98		ng/L	6.08		98.4	55-140			
Surrogate: 13C6-PFDA	5.86		ng/L	6.08		96.5	50-140			
Surrogate: 13C7-PFUnA	5.76		ng/L	6.08		94.9	30-140			
Surrogate: 13C2-PFDoA	5.40		ng/L	6.08		88.9	10-150			
Surrogate: 13C2-PFTeDA	5.21		ng/L	6.08		85.8	10-130			
Surrogate: 13C3-PFBS	11.7		ng/L	12.2		96.7	55-150			
Surrogate: 13C3-PFHxS	11.4		ng/L	12.2		93.7	55-150			
Surrogate: 13C8-PFOS	11.6		ng/L	12.2		95.7	45-140			
Surrogate: 13C2-4:2FTS	21.1		ng/L	24.3		86.9	60-200			
Surrogate: 13C2-6:2FTS	22.6		ng/L	24.3		93.1	60-200			
Surrogate: 13C2-8:2FTS	20.9		ng/L	24.3		85.9	50-200			
Surrogate: 13C8-PFOA	10.0		ng/L	12.2		82.3	30-130			
Surrogate: D3-NMeFOSA	8.76		ng/L	12.2		72.1	15-130			
Surrogate: D5-NEtFOSA	8.70		ng/L	12.2		71.6	10-130			
Surrogate: D3-NMeFOSAA	21.1		ng/L	24.3		86.9	45-200			
Surrogate: D5-NEtFOSAA	22.3		ng/L	24.3		91.8	10-200			
Surrogate: D7-NMeFOSE	102		ng/L	122		83.9	10-150			
Surrogate: D9-NEtFOSE	100		ng/L	122		82.6	10-150			
Surrogate: 13C3-HFPO-DA	51.4		ng/L	48.6		106	25-160			

LCS (B342581-BS1)

Prepared: 06/12/23 Analyzed: 06/15/23

Perfluorobutanoic acid (PFBA)	98.6	3.9	ng/L	94.1		105	58-148			
Perfluoropentanoic acid (PFPeA)	49.7	2.0	ng/L	47.0		106	54-152			
Perfluorohexanoic acid (PFHxA)	25.1	0.98	ng/L	23.5		107	55-152			
Perfluoroheptanoic acid (PFHpA)	23.8	0.98	ng/L	23.5		101	54-154			
Perfluorooctanoic acid (PFOA)	24.5	0.98	ng/L	23.5		104	52-161			
Perfluorononanoic acid (PFNA)	25.2	0.98	ng/L	23.5		107	59-149			
Perfluorodecanoic acid (PFDA)	23.4	0.98	ng/L	23.5		99.7	52-147			
Perfluoroundecanoic acid (PFUnA)	25.0	0.98	ng/L	23.5		106	48-159			
Perfluorododecanoic acid (PFDoA)	25.4	0.98	ng/L	23.5		108	64-142			
Perfluorotridecanoic acid (PFTTrDA)	25.4	0.98	ng/L	23.5		108	49-148			
Perfluorotetradecanoic acid (PFTeDA)	24.4	0.98	ng/L	23.5		104	47-161			
Perfluorobutanesulfonic acid (PFBS)	22.1	0.98	ng/L	20.9		106	62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.9	0.98	ng/L	22.1		108	59-151			
Perfluorohexanesulfonic acid (PFHxS)	22.1	0.98	ng/L	21.5		103	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	23.9	0.98	ng/L	22.4		107	55-152			
Perfluorooctanesulfonic acid (PFOS)	22.4	0.98	ng/L	21.8		103	58-149			
Perfluorononanesulfonic acid (PFNS)	22.5	0.98	ng/L	22.6		99.3	52-148			
Perfluorodecanesulfonic acid (PFDS)	20.9	0.98	ng/L	22.7		92.0	51-147			
Perfluorododecanesulfonic acid (PFDoS)	21.5	0.98	ng/L	22.8		94.1	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	97.1	3.9	ng/L	88.2		110	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	93.6	3.9	ng/L	89.3		105	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	99.9	3.9	ng/L	90.5		110	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.4	0.98	ng/L	23.5		104	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	24.0	0.98	ng/L	23.5		102	63-145			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342581 - Draft Method 1633
LCS (B342581-BS1)

Prepared: 06/12/23 Analyzed: 06/15/23

N-ethyl perfluorooctanesulfonamide (NEtFOSA)	25.4	0.98	ng/L	23.5		108	65-139			
N-MeFOSAA (NMeFOSAA)	23.9	0.98	ng/L	23.5		101	58-144			
N-EtFOSAA (NEtFOSAA)	24.4	0.98	ng/L	23.5		104	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	245	9.8	ng/L	235		104	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	245	9.8	ng/L	235		104	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	99.9	3.9	ng/L	94.1		106	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	91.4	3.9	ng/L	88.8		103	68-146			
9Cl-PF3ONS (F53B Minor)	87.5	3.9	ng/L	88.2		99.2	56-156			
11Cl-PF3OUdS (F53B Major)	88.9	3.9	ng/L	88.8		100	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	206	9.8	ng/L	235		87.6	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1060	49	ng/L	1180		90.6	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	983	49	ng/L	1180		83.6	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	41.5	2.0	ng/L	41.9		99.1	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	44.6	2.0	ng/L	47.0		94.9	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	45.1	2.0	ng/L	47.0		96.0	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	49.0	2.0	ng/L	47.0		104	48-161			
Surrogate: 13C4-PFBA	44.9		ng/L	49.0		91.6	10-130			
Surrogate: 13C5-PFPeA	22.1		ng/L	24.5		90.3	35-150			
Surrogate: 13C5-PFHxA	10.8		ng/L	12.2		88.3	55-150			
Surrogate: 13C4-PFHpA	10.8		ng/L	12.2		88.0	55-150			
Surrogate: 13C8-PFOA	10.8		ng/L	12.2		88.3	60-140			
Surrogate: 13C9-PFNA	5.27		ng/L	6.12		86.1	55-140			
Surrogate: 13C6-PFDA	5.50		ng/L	6.12		89.8	50-140			
Surrogate: 13C7-PFUnA	5.05		ng/L	6.12		82.6	30-140			
Surrogate: 13C2-PFDoA	4.69		ng/L	6.12		76.5	10-150			
Surrogate: 13C2-PFTeDA	4.79		ng/L	6.12		78.3	10-130			
Surrogate: 13C3-PFBS	10.8		ng/L	12.2		88.0	55-150			
Surrogate: 13C3-PFHxS	10.6		ng/L	12.2		86.6	55-150			
Surrogate: 13C8-PFOS	10.8		ng/L	12.2		88.3	45-140			
Surrogate: 13C2-4:2FTS	22.2		ng/L	24.5		90.7	60-200			
Surrogate: 13C2-6:2FTS	23.4		ng/L	24.5		95.7	60-200			
Surrogate: 13C2-8:2FTS	24.0		ng/L	24.5		97.9	50-200			
Surrogate: 13C8-PFOSA	9.83		ng/L	12.2		80.3	30-130			
Surrogate: D3-NMeFOSA	8.24		ng/L	12.2		67.3	15-130			
Surrogate: D5-NEtFOSA	8.22		ng/L	12.2		67.1	10-130			
Surrogate: D3-NMeFOSAA	20.6		ng/L	24.5		84.1	45-200			
Surrogate: D5-NEtFOSAA	20.7		ng/L	24.5		84.6	10-200			
Surrogate: D7-NMeFOSE	94.2		ng/L	122		76.9	10-150			
Surrogate: D9-NEtFOSE	92.3		ng/L	122		75.4	10-150			
Surrogate: 13C3-HFPO-DA	44.5		ng/L	49.0		90.9	25-160			

MRL Check (B342581-MRL1)

Prepared: 06/12/23 Analyzed: 06/15/23

Perfluorobutanoic acid (PFBA)	7.08	3.9	ng/L	7.86		90.1	44-157			
Perfluoropentanoic acid (PFPeA)	3.34	2.0	ng/L	3.93		85.1	57-148			

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QUALITY CONTROL
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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342581 - Draft Method 1633										
MRL Check (B342581-MRL1)										
Prepared: 06/12/23 Analyzed: 06/15/23										
Perfluorohexanoic acid (PFHxA)	1.65	0.98	ng/L	1.97		83.7	62-149			
Perfluoroheptanoic acid (PFHpA)	1.56	0.98	ng/L	1.97		79.2	56-150			
Perfluorooctanoic acid (PFOA)	1.62	0.98	ng/L	1.97		82.2	57-161			
Perfluorononanoic acid (PFNA)	1.54	0.98	ng/L	1.97		78.5	53-157			
Perfluorodecanoic acid (PFDA)	1.52	0.98	ng/L	1.97		77.2	43-158			
Perfluoroundecanoic acid (PFUnA)	1.49	0.98	ng/L	1.97		76.1	50-155			
Perfluorododecanoic acid (PFDoA)	1.51	0.98	ng/L	1.97		77.1	60-141			
Perfluorotridecanoic acid (PFTrDA)	1.63	0.98	ng/L	1.97		82.7	52-140			
Perfluorotetradecanoic acid (PFTeDA)	1.60	0.98	ng/L	1.97		81.5	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.56	0.98	ng/L	1.74		89.2	63-145			
Perfluoropentanesulfonic acid (PFPeS)	1.59	0.98	ng/L	1.85		85.9	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.58	0.98	ng/L	1.80		87.9	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	1.50	0.98	ng/L	1.87		80.4	51-150			
Perfluorooctanesulfonic acid (PFOS)	1.59	0.98	ng/L	1.82		87.4	43-162			
Perfluorononanesulfonic acid (PFNS)	1.63	0.98	ng/L	1.89		86.4	46-151			
Perfluorodecanesulfonic acid (PFDS)	1.54	0.98	ng/L	1.90		81.1	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.62	0.98	ng/L	1.91		85.2	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	6.23	3.9	ng/L	7.37		84.5	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	6.60	3.9	ng/L	7.47		88.3	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	6.60	3.9	ng/L	7.57		87.2	46-165			
Perfluorooctanesulfonamide (PFOSA)	1.61	0.98	ng/L	1.97		81.7	47-163			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	1.68	0.98	ng/L	1.97		85.2	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	1.71	0.98	ng/L	1.97		87.2	49-156			
N-MeFOSAA (NMeFOSAA)	1.63	0.98	ng/L	1.97		82.8	32-160			
N-EtFOSAA (NEtFOSAA)	1.71	0.98	ng/L	1.97		86.8	51-154			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	15.7	9.8	ng/L	19.7		80.0	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	15.8	9.8	ng/L	19.7		80.3	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	6.64	3.9	ng/L	7.86		84.5	58-154			
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	6.26	3.9	ng/L	7.42		84.4	61-148			
9Cl-PF3ONS (F53B Minor)	6.13	3.9	ng/L	7.37		83.2	44-167			
11Cl-PF3OUDS (F53B Major)	6.23	3.9	ng/L	7.42		84.0	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	15.8	9.8	ng/L	19.7		80.5	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	77.6	49	ng/L	98.3		79.0	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	75.1	49	ng/L	98.3		76.4	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	3.16	2.0	ng/L	3.50		90.2	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.49	2.0	ng/L	3.93		88.9	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.40	2.0	ng/L	3.93		86.5	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.52	2.0	ng/L	3.93		89.6	47-160			
Surrogate: 13C4-PFBA	44.2		ng/L	49.1		90.0	10-130			
Surrogate: 13C5-PFPeA	21.4		ng/L	24.6		87.3	35-150			
Surrogate: 13C5-PFHxA	10.5		ng/L	12.3		85.2	55-150			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342581 - Draft Method 1633
MRL Check (B342581-MRL1)

Prepared: 06/12/23 Analyzed: 06/15/23

Surrogate: 13C4-PFHpA	10.3		ng/L	12.3		83.9	55-150			
Surrogate: 13C8-PFOA	10.2		ng/L	12.3		83.1	60-140			
Surrogate: 13C9-PFNA	5.36		ng/L	6.14		87.3	55-140			
Surrogate: 13C6-PFDA	5.00		ng/L	6.14		81.5	50-140			
Surrogate: 13C7-PFUnA	4.85		ng/L	6.14		79.0	30-140			
Surrogate: 13C2-PFDoA	4.84		ng/L	6.14		78.7	10-150			
Surrogate: 13C2-PFTeDA	4.79		ng/L	6.14		78.0	10-130			
Surrogate: 13C3-PFBS	10.7		ng/L	12.3		86.8	55-150			
Surrogate: 13C3-PFHxS	10.1		ng/L	12.3		82.2	55-150			
Surrogate: 13C8-PFOS	10.1		ng/L	12.3		82.0	45-140			
Surrogate: 13C2-4:2FTS	19.1		ng/L	24.6		77.9	60-200			
Surrogate: 13C2-6:2FTS	21.3		ng/L	24.6		86.7	60-200			
Surrogate: 13C2-8:2FTS	22.6		ng/L	24.6		92.1	50-200			
Surrogate: 13C8-PFOSA	9.19		ng/L	12.3		74.8	30-130			
Surrogate: D3-NMeFOSA	7.93		ng/L	12.3		64.6	15-130			
Surrogate: D5-NEtFOSA	7.84		ng/L	12.3		63.8	10-130			
Surrogate: D3-NMeFOSAA	19.1		ng/L	24.6		77.9	45-200			
Surrogate: D5-NEtFOSAA	19.0		ng/L	24.6		77.5	10-200			
Surrogate: D7-NMeFOSE	90.5		ng/L	123		73.7	10-150			
Surrogate: D9-NEtFOSE	88.0		ng/L	123		71.7	10-150			
Surrogate: 13C3-HFPO-DA	43.1		ng/L	49.1		87.7	25-160			

Matrix Spike (B342581-MS1)

Source: 23F0711-04

Prepared: 06/12/23 Analyzed: 06/15/23

Perfluorobutanoic acid (PFBA)	94.1	4.1	ng/L	98.5	1.54	93.9	58-148			
Perfluoropentanoic acid (PFPeA)	46.9	2.1	ng/L	49.3	ND	95.2	54-152			
Perfluorohexanoic acid (PFHxA)	23.8	1.0	ng/L	24.6	ND	96.6	55-152			
Perfluoroheptanoic acid (PFHpA)	22.6	1.0	ng/L	24.6	ND	91.6	54-154			
Perfluorooctanoic acid (PFOA)	22.8	1.0	ng/L	24.6	ND	92.7	52-161			
Perfluorononanoic acid (PFNA)	21.8	1.0	ng/L	24.6	ND	88.7	59-149			
Perfluorodecanoic acid (PFDA)	22.7	1.0	ng/L	24.6	ND	92.1	52-147			
Perfluoroundecanoic acid (PFUnA)	23.7	1.0	ng/L	24.6	ND	96.1	48-159			
Perfluorododecanoic acid (PFDoA)	22.8	1.0	ng/L	24.6	ND	92.4	64-142			
Perfluorotridecanoic acid (PFTrDA)	23.3	1.0	ng/L	24.6	ND	94.7	49-148			
Perfluorotetradecanoic acid (PFTeDA)	24.3	1.0	ng/L	24.6	ND	98.5	47-161			
Perfluorobutanesulfonic acid (PFBS)	20.3	1.0	ng/L	21.9	0.414	91.0	62-144			
Perfluoropentanesulfonic acid (PFPeS)	21.6	1.0	ng/L	23.2	ND	93.1	59-151			
Perfluorohexanesulfonic acid (PFHxS)	20.2	1.0	ng/L	22.5	ND	89.6	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	22.6	1.0	ng/L	23.5	ND	96.2	55-152			
Perfluorooctanesulfonic acid (PFOS)	20.4	1.0	ng/L	22.8	ND	89.3	58-149			
Perfluorononanesulfonic acid (PFNS)	19.8	1.0	ng/L	23.7	ND	83.3	52-148			
Perfluorodecanesulfonic acid (PFDS)	17.2	1.0	ng/L	23.8	ND	72.5	51-147			
Perfluorododecanesulfonic acid (PFDoS)	18.8	1.0	ng/L	23.9	ND	78.6	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	88.8	4.1	ng/L	92.4	ND	96.1	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	92.6	4.1	ng/L	93.6	ND	98.9	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	93.7	4.1	ng/L	94.8	ND	98.8	63-152			
Perfluorooctanesulfonamide (PFOSA)	23.8	1.0	ng/L	24.6	ND	96.6	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	24.5	1.0	ng/L	24.6	ND	99.3	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	22.9	1.0	ng/L	24.6	ND	93.2	65-139			
N-MeFOSAA (NMeFOSAA)	25.1	1.0	ng/L	24.6	ND	102	58-144			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342581 - Draft Method 1633

Matrix Spike (B342581-MS1)		Source: 23F0711-04			Prepared: 06/12/23 Analyzed: 06/15/23					
N-EtFOSAA (NEtFOSAA)	24.0	1.0	ng/L	24.6	ND	97.4	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	236	10	ng/L	246	ND	95.9	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	233	10	ng/L	246	ND	94.7	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	87.3	4.1	ng/L	98.5	ND	88.6	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	79.3	4.1	ng/L	93.0	ND	85.3	68-146			
9Cl-PF3ONS (F53B Minor)	70.9	4.1	ng/L	92.4	ND	76.7	56-156			
11Cl-PF3OUdS (F53B Major)	63.8	4.1	ng/L	93.0	ND	68.6	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	196	10	ng/L	246	ND	79.5	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA) (5:3FTCA)	969	51	ng/L	1230	ND	78.7	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	919	51	ng/L	1230	ND	74.6	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	40.7	2.1	ng/L	43.8	ND	92.9	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	42.9	2.1	ng/L	49.3	ND	87.1	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	45.2	2.1	ng/L	49.3	ND	91.7	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	46.1	2.1	ng/L	49.3	ND	93.5	48-161			
Surrogate: 13C4-PFBA	18.3		ng/L	51.3		35.6	10-130			
Surrogate: 13C5-PFPeA	22.2		ng/L	25.7		86.4	35-150			
Surrogate: 13C5-PFHxA	10.9		ng/L	12.8		85.0	55-150			
Surrogate: 13C4-PFHpA	10.8		ng/L	12.8		83.9	55-150			
Surrogate: 13C8-PFOA	10.6		ng/L	12.8		82.5	60-140			
Surrogate: 13C9-PFNA	5.42		ng/L	6.41		84.5	55-140			
Surrogate: 13C6-PFDA	5.06		ng/L	6.41		78.8	50-140			
Surrogate: 13C7-PFUnA	4.33		ng/L	6.41		67.6	30-140			
Surrogate: 13C2-PFDoA	4.11		ng/L	6.41		64.1	10-150			
Surrogate: 13C2-PFTeDA	4.10		ng/L	6.41		63.9	10-130			
Surrogate: 13C3-PFBS	11.0		ng/L	12.8		85.4	55-150			
Surrogate: 13C3-PFHxS	10.6		ng/L	12.8		82.8	55-150			
Surrogate: 13C8-PFOS	10.3		ng/L	12.8		80.2	45-140			
Surrogate: 13C2-4:2FTS	23.4		ng/L	25.7		91.1	60-200			
Surrogate: 13C2-6:2FTS	24.4		ng/L	25.7		95.3	60-200			
Surrogate: 13C2-8:2FTS	21.9		ng/L	25.7		85.3	50-200			
Surrogate: 13C8-PFOA	9.43		ng/L	12.8		73.5	30-130			
Surrogate: D3-NMeFOSA	5.98		ng/L	12.8		46.6	15-130			
Surrogate: D5-NEtFOSA	6.21		ng/L	12.8		48.4	10-130			
Surrogate: D3-NMeFOSAA	17.4		ng/L	25.7		68.0	45-200			
Surrogate: D5-NEtFOSAA	16.6		ng/L	25.7		64.7	10-200			
Surrogate: D7-NMeFOSE	71.3		ng/L	128		55.6	10-150			
Surrogate: D9-NEtFOSE	71.0		ng/L	128		55.3	10-150			
Surrogate: 13C3-HFPO-DA	46.9		ng/L	51.3		91.4	25-160			
Matrix Spike Dup (B342581-MSD1)		Source: 23F0711-04			Prepared: 06/12/23 Analyzed: 06/15/23					
Perfluorobutanoic acid (PFBA)	90.5	3.9	ng/L	93.6	1.54	95.0	58-148	3.87	20	
Perfluoropentanoic acid (PFPeA)	45.6	2.0	ng/L	46.8	ND	97.4	54-152	2.89	20	
Perfluorohexanoic acid (PFHxA)	22.5	0.98	ng/L	23.4	ND	96.1	55-152	5.65	25	
Perfluoroheptanoic acid (PFHpA)	22.0	0.98	ng/L	23.4	ND	94.2	54-154	2.31	25	
Perfluorooctanoic acid (PFOA)	21.6	0.98	ng/L	23.4	ND	92.3	52-161	5.56	25	

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342581 - Draft Method 1633										
Matrix Spike Dup (B342581-MSD1)	Source: 23F0711-04			Prepared: 06/12/23 Analyzed: 06/15/23						
Perfluorononanoic acid (PFNA)	22.7	0.98	ng/L	23.4	ND	97.1	59-149	4.00	25	
Perfluorodecanoic acid (PFDA)	22.3	0.98	ng/L	23.4	ND	95.3	52-147	1.69	25	
Perfluoroundecanoic acid (PFUnA)	23.1	0.98	ng/L	23.4	ND	98.7	48-159	2.36	30	
Perfluorododecanoic acid (PFDoA)	21.9	0.98	ng/L	23.4	ND	93.7	64-142	3.71	25	
Perfluorotridecanoic acid (PFTrDA)	21.9	0.98	ng/L	23.4	ND	93.7	49-148	6.13	25	
Perfluorotetradecanoic acid (PFTeDA)	22.6	0.98	ng/L	23.4	ND	96.5	47-161	7.08	25	
Perfluorobutanesulfonic acid (PFBS)	20.1	0.98	ng/L	20.8	0.414	94.9	62-144	0.926	20	
Perfluoropentanesulfonic acid (PFPeS)	22.3	0.98	ng/L	22.0	ND	101	59-151	3.25	25	
Perfluorohexanesulfonic acid (PFHxS)	20.3	0.98	ng/L	21.4	ND	94.9	57-146	0.634	25	
Perfluoroheptanesulfonic acid (PFHpS)	22.7	0.98	ng/L	22.3	ND	102	55-152	0.498	25	
Perfluorooctanesulfonic acid (PFOS)	20.2	0.98	ng/L	21.7	ND	93.0	58-149	1.08	20	
Perfluorononanesulfonic acid (PFNS)	19.8	0.98	ng/L	22.5	ND	87.7	52-148	0.0399	25	
Perfluorodecanesulfonic acid (PFDS)	17.0	0.98	ng/L	22.6	ND	75.4	51-147	1.21	25	
Perfluorododecanesulfonic acid (PFDoS)	17.7	0.98	ng/L	22.7	ND	78.0	36-145	5.80	30	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	87.2	3.9	ng/L	87.8	ND	99.3	67-146	1.81	25	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	88.7	3.9	ng/L	88.9	ND	99.7	61-151	4.31	30	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	87.4	3.9	ng/L	90.1	ND	97.0	63-152	7.00	30	
Perfluorooctanesulfonamide (PFOSA)	22.6	0.98	ng/L	23.4	ND	96.5	61-148	5.22	20	
N-methyl perfluorooctanesulfonamide (NMeFOSA)	21.8	0.98	ng/L	23.4	ND	93.1	63-145	11.5	25	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	21.6	0.98	ng/L	23.4	ND	92.1	65-139	6.22	25	
N-MeFOSAA (NMeFOSAA)	23.4	0.98	ng/L	23.4	ND	100	58-144	7.09	25	
N-EtFOSAA (NEtFOSAA)	23.4	0.98	ng/L	23.4	ND	100	59-146	2.31	25	
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	218	9.8	ng/L	234	ND	93.3	71-136	7.83	20	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	223	9.8	ng/L	234	ND	95.4	69-137	4.36	25	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	89.8	3.9	ng/L	93.6	ND	95.9	63-144	2.86	25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	81.4	3.9	ng/L	88.4	ND	92.1	68-146	2.64	20	
9Cl-PF3ONS (F53B Minor)	74.9	3.9	ng/L	87.8	ND	85.3	56-156	5.52	30	
11Cl-PF3OUDS (F53B Major)	65.1	3.9	ng/L	88.4	ND	73.6	46-156	1.91	35	
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	190	9.8	ng/L	234	ND	81.3	62-129	2.94	20	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	977	49	ng/L	1170	ND	83.5	63-134	0.778	20	
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	926	49	ng/L	1170	ND	79.2	50-138	0.802	25	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	38.8	2.0	ng/L	41.7	ND	93.1	56-151	4.87	20	
Perfluoro-3-methoxypropanoic acid (PFMPA)	40.5	2.0	ng/L	46.8	ND	86.5	51-145	5.84	25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	43.1	2.0	ng/L	46.8	ND	92.2	55-148	4.63	20	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	43.3	2.0	ng/L	46.8	ND	92.5	48-161	6.18	35	
Surrogate: 13C4-PFBA	19.5		ng/L	48.8		40.0	10-130			
Surrogate: 13C5-PFPeA	21.4		ng/L	24.4		87.8	35-150			
Surrogate: 13C5-PFHxA	10.6		ng/L	12.2		87.1	55-150			
Surrogate: 13C4-PFHpA	10.3		ng/L	12.2		84.3	55-150			
Surrogate: 13C8-PFOA	10.4		ng/L	12.2		85.5	60-140			
Surrogate: 13C9-PFNA	5.26		ng/L	6.10		86.3	55-140			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342581 - Draft Method 1633
Matrix Spike Dup (B342581-MSD1)
Source: 23F0711-04

Prepared: 06/12/23 Analyzed: 06/15/23

Surrogate: 13C6-PFDA	5.04		ng/L	6.10		82.6	50-140			
Surrogate: 13C7-PFUnA	4.48		ng/L	6.10		73.6	30-140			
Surrogate: 13C2-PFDoA	4.26		ng/L	6.10		70.0	10-150			
Surrogate: 13C2-PFTeDA	4.17		ng/L	6.10		68.4	10-130			
Surrogate: 13C3-PFBS	10.4		ng/L	12.2		85.2	55-150			
Surrogate: 13C3-PFHxS	9.81		ng/L	12.2		80.5	55-150			
Surrogate: 13C8-PFOS	9.96		ng/L	12.2		81.7	45-140			
Surrogate: 13C2-4:2FTS	22.1		ng/L	24.4		90.8	60-200			
Surrogate: 13C2-6:2FTS	23.2		ng/L	24.4		95.1	60-200			
Surrogate: 13C2-8:2FTS	21.6		ng/L	24.4		88.7	50-200			
Surrogate: 13C8-PFOSA	9.18		ng/L	12.2		75.3	30-130			
Surrogate: D3-NMeFOSA	6.82		ng/L	12.2		56.0	15-130			
Surrogate: D5-NEtFOSA	6.88		ng/L	12.2		56.4	10-130			
Surrogate: D3-NMeFOSAA	18.1		ng/L	24.4		74.1	45-200			
Surrogate: D5-NEtFOSAA	17.3		ng/L	24.4		70.9	10-200			
Surrogate: D7-NMeFOSE	73.0		ng/L	122		59.9	10-150			
Surrogate: D9-NEtFOSE	71.7		ng/L	122		58.8	10-150			
Surrogate: 13C3-HFPO-DA	44.4		ng/L	48.8		91.1	25-160			

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QUALITY CONTROL
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342615 - Draft Method 1633
Blank (B342615-BLK1)

Prepared & Analyzed: 06/08/23

Total Suspended Solids	ND	5.0	mg/L							

LCS (B342615-BS1)

Prepared & Analyzed: 06/08/23

Total Suspended Solids	161	5.0	mg/L	200		80.5	64.1-125			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
PF-18	Duplicate analysis confirmed Extracted Internal Standard failure due to matrix effects.

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>Draft Method 1633 in Water</i>	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NH-P,PA,WV
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	NH-P,NY,PA,WV
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV

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Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2023
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

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ENV-FRM-ELON-0001 V05__ Sample Receiving Checklist

Log In Back-Sheet

Login Sample Receipt Checklist - (Rejection Criteria Listing
- Using Acceptance Policy) Any False statement will be
brought to the attention of the Client - True or False



Client EA Engineering
Project Town & Country Dry Cleaners

MCP/RCP Required N/A

Deliverable Package Requirement N/A

Location Brighton, NY

PWSID# (When Applicable) N/A

Arrival Method:

Courier ☐ Fed Ex ☒ Walk In ☐ Other ☐

Received By / Date / Time AAM / 6-7-23 / 0928

~~Back Sheet By / Date / Time~~ AAM / 6-7-23 / 1048

Temperature Method Temp. Gun # 5

Temp ☒ < 6° C Actual Temperature 2.3° C

Rush Samples: Yes / ☒ No Notify

Short Hold: Yes / ☒ No Notify

Notes regarding Samples/COC outside of SOP:

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☒	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☒	☒
MS/MSD	☒	☒ AAM
Trip Blanks	☐	☒
Lab to Filters	☐	☒
COC Legible	☒	☐

COC Included: (Check all included)

Client ☒ Analysis ☒ Sampler Name ☒
Project ☒ IDs ☒ Collection Date/Time ☒

All Samples Proper pH: ☒ N/A ☐ ☐

Additional Container Notes

Sample	Soils Jars				Ambers				Plastics						VOA Vials						Other / Fill in								
	(Circle Amb/Clear)				1 Liter		250mL		100mL	1 Liter		500mL	250mL					VOA Vials						Other / Fill in					
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	Unpreserved	HCL	Sulfuric	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Sulfuric	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric	NaOH	NaOH/Zinc	Unpreserved	HCl	MeOH	D.I. Water	Bisulfate	Col/Bact	125mL plastic	
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2																													
3																													
4																													
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20																													

June 21, 2023

Moriah Gilkey
NYDEC_EA Engineering, Science & Tech. - NY
269 West Jefferson St.
Syracuse, NY 13202

Project Location: Brighton, NY
Client Job Number:
Project Number: 828149
Laboratory Work Order Number: 23F0714

Enclosed are results of analyses for samples as received by the laboratory on June 7, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle K. Stuckey
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332NYDEC_EA Engineering, Science & Tech. - NY
269 West Jefferson St.
Syracuse, NY 13202
ATTN: Moriah Gilkey

REPORT DATE: 6/21/2023

PURCHASE ORDER NUMBER: 147421

PROJECT NUMBER: 828149

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F0714

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Brighton, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
828149-MW-13	23F0714-01	Ground Water		SW-846 8260D SW-846 8270E	
828149-MW-13B	23F0714-02	Ground Water		SW-846 8260D SW-846 8270E	
828149-DP-17	23F0714-03	Ground Water		SW-846 8260D SW-846 8270E	
828149-MW-2	23F0714-04	Ground Water		SW-846 8260D SW-846 8270E	
828149-MW-17B	23F0714-05	Ground Water		SW-846 8260D SW-846 8270E	
828149-FD-01	23F0714-06	Ground Water		SW-846 8260D SW-846 8270E	
818149-TB-01	23F0714-07	Trip Blank Water		SW-846 8260D	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SW-846 8260D

Qualifications:**L-02**

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:**Vinyl Acetate**

B342602-BS1, B342602-BSD1, S088923-CCV1

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**Iodomethane**

B342602-BLK1, B342602-BS1, B342602-BSD1, S088923-CCV1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:**2-Chloroethyl Vinyl Ether**

B342602-BS1

Bromochloromethane

B342602-BSD1

Diisopropyl Ether (DIPE)

B342602-BSD1

Ethyl Acetate

B342602-BSD1

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.

Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:**Methyl Acetate**

23F0714-05[828149-MW-17B], B342602-MS1, B342602-MSD1

tert-Butyl Alcohol (TBA)

23F0714-05[828149-MW-17B], B342602-MS1, B342602-MSD1

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:**Chloromethane**

B342602-MS1

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene**

B342602-MS1

1,4-Dioxane

B342602-MS1

Acetone

B342602-MS1

Acrylonitrile

B342602-MS1

Bromomethane

B342602-MS1

Naphthalene

B342602-MS1

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:**Chloromethane**

23F0714-05[828149-MW-17B], B342602-MS1, B342602-MSD1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

23F0714-01[828149-MW-13]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**1,4-Dioxane**

23F0714-01[828149-MW-13], 23F0714-02[828149-MW-13B], 23F0714-03[828149-DP-17], 23F0714-04[828149-MW-2], 23F0714-05[828149-MW-17B], 23F0714-06[828149-FD-01], 23F0714-07[818149-TB-01], B342602-BLK1, B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

2-Chloroethyl Vinyl Ether

B342602-BLK1, B342602-BS1, B342602-BSD1, S088923-CCV1

Acetone

23F0714-01[828149-MW-13], 23F0714-02[828149-MW-13B], 23F0714-03[828149-DP-17], 23F0714-04[828149-MW-2], 23F0714-05[828149-MW-17B], 23F0714-06[828149-FD-01], 23F0714-07[818149-TB-01], B342602-BLK1, B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

Acrylonitrile

23F0714-01[828149-MW-13], 23F0714-02[828149-MW-13B], 23F0714-03[828149-DP-17], 23F0714-04[828149-MW-2], 23F0714-05[828149-MW-17B], 23F0714-06[828149-FD-01], 23F0714-07[818149-TB-01], B342602-BLK1, B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

Dichlorofluoromethane (Freon 21)

B342602-BLK1, B342602-BS1, B342602-BSD1, S088923-CCV1

Iodomethane

B342602-BLK1, B342602-BS1, B342602-BSD1, S088923-CCV1

Methyl Acetate

23F0714-01[828149-MW-13], 23F0714-02[828149-MW-13B], 23F0714-03[828149-DP-17], 23F0714-04[828149-MW-2], 23F0714-05[828149-MW-17B], 23F0714-06[828149-FD-01], 23F0714-07[818149-TB-01], B342602-BLK1, B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

tert-Butyl Alcohol (TBA)

23F0714-01[828149-MW-13], 23F0714-02[828149-MW-13B], 23F0714-03[828149-DP-17], 23F0714-04[828149-MW-2], 23F0714-05[828149-MW-17B], 23F0714-06[828149-FD-01], 23F0714-07[818149-TB-01], B342602-BLK1, B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

Trichlorofluoromethane (Freon 11)

23F0714-01[828149-MW-13], 23F0714-02[828149-MW-13B], 23F0714-03[828149-DP-17], 23F0714-04[828149-MW-2], 23F0714-05[828149-MW-17B], 23F0714-06[828149-FD-01], 23F0714-07[818149-TB-01], B342602-BLK1, B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**Bromochloromethane**

B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

Cyclohexane

B342602-BS1, B342602-BSD1, S088923-CCV1

Diisopropyl Ether (DIPE)

B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

Vinyl Acetate

B342602-BS1, B342602-BSD1, S088923-CCV1

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:**Chloromethane**

23F0714-01[828149-MW-13], 23F0714-02[828149-MW-13B], 23F0714-03[828149-DP-17], 23F0714-04[828149-MW-2], 23F0714-05[828149-MW-17B], 23F0714-06[828149-FD-01], 23F0714-07[818149-TB-01], B342602-BLK1, B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

Dichlorodifluoromethane (Freon 12)

23F0714-01[828149-MW-13], 23F0714-02[828149-MW-13B], 23F0714-03[828149-DP-17], 23F0714-04[828149-MW-2], 23F0714-05[828149-MW-17B], 23F0714-06[828149-FD-01], 23F0714-07[818149-TB-01], B342602-BLK1, B342602-BS1, B342602-BSD1, B342602-MS1, B342602-MSD1, S088923-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-13

Sampled: 6/5/2023 11:32

Sample ID: 23F0714-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2500	100	µg/L	50	V-05	SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Acrylonitrile	ND	250	23	µg/L	50	V-05	SW-846 8260D	6/9/23	6/9/23 15:49	EEH
tert-Amyl Methyl Ether (TAME)	ND	25	6.6	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Benzene	ND	50	9.2	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Bromobenzene	ND	50	7.4	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Bromochloromethane	ND	50	14	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Bromodichloromethane	ND	25	7.9	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Bromoform	ND	50	20	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Bromomethane	ND	100	66	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
2-Butanone (MEK)	ND	1000	84	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
tert-Butyl Alcohol (TBA)	ND	1000	210	µg/L	50	V-05	SW-846 8260D	6/9/23	6/9/23 15:49	EEH
n-Butylbenzene	ND	50	7.5	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
sec-Butylbenzene	ND	50	6.3	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
tert-Butylbenzene	ND	50	7.1	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	25	7.7	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Carbon Disulfide	ND	250	78	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Carbon Tetrachloride	ND	250	8.2	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Chlorobenzene	ND	50	5.9	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Chlorodibromomethane	ND	25	10	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Chloroethane	ND	100	17	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Chloroform	ND	100	7.0	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Chloromethane	ND	100	25	µg/L	50	V-34	SW-846 8260D	6/9/23	6/9/23 15:49	EEH
2-Chlorotoluene	ND	50	7.7	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
4-Chlorotoluene	ND	50	7.7	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	43	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,2-Dibromoethane (EDB)	ND	25	8.0	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Dibromomethane	ND	50	16	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,2-Dichlorobenzene	ND	50	6.5	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,3-Dichlorobenzene	ND	50	6.8	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,4-Dichlorobenzene	ND	50	6.4	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
trans-1,4-Dichloro-2-butene	ND	100	75	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Dichlorodifluoromethane (Freon 12)	ND	100	8.0	µg/L	50	V-34	SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,1-Dichloroethane	ND	50	6.8	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,2-Dichloroethane	ND	50	15	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,1-Dichloroethylene	ND	50	7.0	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
cis-1,2-Dichloroethylene	170	50	7.0	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
trans-1,2-Dichloroethylene	ND	50	8.6	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,2-Dichloropropane	ND	50	9.7	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,3-Dichloropropane	ND	25	5.8	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
2,2-Dichloropropane	ND	50	17	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,1-Dichloropropene	ND	100	7.5	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
cis-1,3-Dichloropropene	ND	25	8.2	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
trans-1,3-Dichloropropene	ND	25	7.1	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Diethyl Ether	ND	100	7.2	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-13

Sampled: 6/5/2023 11:32

Sample ID: 23F0714-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	25	10	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,4-Dioxane	ND	2500	900	µg/L	50	V-05	SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Ethylbenzene	ND	50	11	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Hexachlorobutadiene	ND	30	23	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
2-Hexanone (MBK)	ND	500	60	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Isopropylbenzene (Cumene)	ND	50	7.6	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
p-Isopropyltoluene (p-Cymene)	ND	50	6.3	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Methyl Acetate	ND	50	30	µg/L	50	V-05	SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Methyl tert-Butyl Ether (MTBE)	ND	50	8.5	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Methyl Cyclohexane	ND	50	7.8	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Methylene Chloride	ND	250	8.8	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
4-Methyl-2-pentanone (MIBK)	ND	500	66	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Naphthalene	ND	100	19	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
n-Propylbenzene	ND	50	6.2	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Styrene	ND	50	7.5	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,1,1,2-Tetrachloroethane	ND	50	8.1	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,1,2,2-Tetrachloroethane	ND	25	6.8	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Tetrachloroethylene	3200	50	8.4	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Tetrahydrofuran	ND	500	24	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Toluene	ND	50	11	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,2,3-Trichlorobenzene	ND	250	17	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,2,4-Trichlorobenzene	ND	50	15	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,3,5-Trichlorobenzene	ND	50	10	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,1,1-Trichloroethane	ND	50	7.5	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,1,2-Trichloroethane	ND	50	9.6	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Trichloroethylene	120	50	8.7	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Trichlorofluoromethane (Freon 11)	ND	100	7.7	µg/L	50	V-05	SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,2,3-Trichloropropane	ND	100	14	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	50	10	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,2,4-Trimethylbenzene	ND	50	9.9	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
1,3,5-Trimethylbenzene	ND	50	7.5	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Vinyl Chloride	ND	100	12	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
m+p Xylene	ND	100	25	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
o-Xylene	ND	50	12	µg/L	50		SW-846 8260D	6/9/23	6/9/23 15:49	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	104		70-130				6/9/23 15:49			
Toluene-d8	102		70-130				6/9/23 15:49			
4-Bromofluorobenzene	95.8		70-130				6/9/23 15:49			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-13

Sampled: 6/5/2023 11:32

Sample ID: 23F0714-01

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.033	µg/L	1		SW-846 8270E	6/12/23	6/21/23 13:53	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	26.8		15-110				6/21/23 13:53			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-13B

Sampled: 6/5/2023 12:57

Sample ID: 23F0714-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Acrylonitrile	ND	5.0	0.47	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:26	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:26	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Chloromethane	ND	2.0	0.50	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 14:26	EEH
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
cis-1,2-Dichloroethylene	7.0	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-13B

Sampled: 6/5/2023 12:57

Sample ID: 23F0714-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,4-Dioxane	ND	50	18	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Tetrachloroethylene	1.0	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Trichloroethylene	1.9	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:26	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	105		70-130				6/9/23 14:26			
Toluene-d8	102		70-130				6/9/23 14:26			
4-Bromofluorobenzene	95.2		70-130				6/9/23 14:26			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-13B

Sampled: 6/5/2023 12:57

Sample ID: 23F0714-02

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.033	µg/L	1		SW-846 8270E	6/12/23	6/21/23 14:13	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	32.0		15-110				6/21/23 14:13			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-DP-17

Sampled: 6/5/2023 13:54

Sample ID: 23F0714-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Acrylonitrile	ND	5.0	0.47	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:31	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:31	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Chloromethane	ND	2.0	0.50	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 13:31	EEH
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-DP-17

Sampled: 6/5/2023 13:54

Sample ID: 23F0714-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,4-Dioxane	ND	50	18	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:31	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	107		70-130				6/9/23 13:31			
Toluene-d8	101		70-130				6/9/23 13:31			
4-Bromofluorobenzene	96.1		70-130				6/9/23 13:31			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-DP-17

Sampled: 6/5/2023 13:54

Sample ID: 23F0714-03

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.033	µg/L	1		SW-846 8270E	6/12/23	6/21/23 14:34	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	27.9		15-110				6/21/23 14:34			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-2

Sampled: 6/5/2023 14:55

Sample ID: 23F0714-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Acrylonitrile	ND	5.0	0.47	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:53	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:53	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Chloromethane	ND	2.0	0.50	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 14:53	EEH
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
cis-1,2-Dichloroethylene	22	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
trans-1,2-Dichloroethylene	0.31	1.0	0.17	µg/L	1	J	SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-2

Sampled: 6/5/2023 14:55

Sample ID: 23F0714-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,4-Dioxane	ND	50	18	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Tetrachloroethylene	69	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Trichloroethylene	18	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 14:53	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	107		70-130				6/9/23 14:53			
Toluene-d8	102		70-130				6/9/23 14:53			
4-Bromofluorobenzene	96.1		70-130				6/9/23 14:53			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-2

Sampled: 6/5/2023 14:55

Sample ID: 23F0714-04

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.033	µg/L	1		SW-846 8270E	6/12/23	6/21/23 14:54	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	29.5		15-110				6/21/23 14:54			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-17B

Sampled: 6/5/2023 15:13

Sample ID: 23F0714-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Acrylonitrile	ND	5.0	0.47	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:59	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	MS-07A, V-05	SW-846 8260D	6/9/23	6/9/23 13:59	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Chloromethane	ND	2.0	0.50	µg/L	1	R-06, V-34	SW-846 8260D	6/9/23	6/9/23 13:59	EEH
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-17B

Sampled: 6/5/2023 15:13

Sample ID: 23F0714-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,4-Dioxane	ND	50	18	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1	MS-07A, V-05	SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 13:59	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	105		70-130				6/9/23 13:59			
Toluene-d8	103		70-130				6/9/23 13:59			
4-Bromofluorobenzene	94.5		70-130				6/9/23 13:59			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-MW-17B

Sampled: 6/5/2023 15:13

Sample ID: 23F0714-05

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.032	µg/L	1		SW-846 8270E	6/12/23	6/21/23 15:14	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	27.1		15-110				6/21/23 15:14			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-FD-01

Sampled: 6/5/2023 00:00

Sample ID: 23F0714-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Acrylonitrile	ND	5.0	0.47	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 15:21	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 15:21	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Chloromethane	ND	2.0	0.50	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 15:21	EEH
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
cis-1,2-Dichloroethylene	21	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
trans-1,2-Dichloroethylene	0.36	1.0	0.17	µg/L	1	J	SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-FD-01

Sampled: 6/5/2023 00:00

Sample ID: 23F0714-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,4-Dioxane	ND	50	18	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Tetrachloroethylene	70	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Trichloroethylene	17	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 15:21	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	107		70-130				6/9/23 15:21			
Toluene-d8	102		70-130				6/9/23 15:21			
4-Bromofluorobenzene	95.9		70-130				6/9/23 15:21			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 828149-FD-01

Sampled: 6/5/2023 00:00

Sample ID: 23F0714-06

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.033	µg/L	1		SW-846 8270E	6/12/23	6/21/23 15:35	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	29.0		15-110				6/21/23 15:35			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 818149-TB-01

Sampled: 6/5/2023 15:57

Sample ID: 23F0714-07

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	8.8	50	2.0	µg/L	1	J, V-05	SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Acrylonitrile	ND	5.0	0.47	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 12:09	EEH
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 12:09	EEH
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Chloromethane	ND	2.0	0.50	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 12:09	EEH
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1	V-34	SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0714

Date Received: 6/7/2023

Field Sample #: 818149-TB-01

Sampled: 6/5/2023 15:57

Sample ID: 23F0714-07

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,4-Dioxane	ND	50	18	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1	V-05	SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/9/23	6/9/23 12:09	EEH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	108		70-130				6/9/23 12:09			
Toluene-d8	102		70-130				6/9/23 12:09			
4-Bromofluorobenzene	95.6		70-130				6/9/23 12:09			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data****Prep Method:SW-846 5030B Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0714-01 [828149-MW-13]	B342602	0.1	5.00	06/09/23
23F0714-02 [828149-MW-13B]	B342602	5	5.00	06/09/23
23F0714-03 [828149-DP-17]	B342602	5	5.00	06/09/23
23F0714-04 [828149-MW-2]	B342602	5	5.00	06/09/23
23F0714-05 [828149-MW-17B]	B342602	5	5.00	06/09/23
23F0714-06 [828149-FD-01]	B342602	5	5.00	06/09/23
23F0714-07 [818149-TB-01]	B342602	5	5.00	06/09/23

Prep Method:SW-846 3510C Analytical Method:SW-846 8270E

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0714-01 [828149-MW-13]	B342978	980	1.00	06/12/23
23F0714-02 [828149-MW-13B]	B342978	980	1.00	06/12/23
23F0714-03 [828149-DP-17]	B342978	1000	1.00	06/12/23
23F0714-04 [828149-MW-2]	B342978	1000	1.00	06/12/23
23F0714-05 [828149-MW-17B]	B342978	1020	1.00	06/12/23
23F0714-06 [828149-FD-01]	B342978	975	1.00	06/12/23

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342602 - SW-846 5030B										
Blank (B342602-BLK1)										
Prepared: 06/08/23 Analyzed: 06/09/23										
Acetone	ND	50	µg/L							V-05
Acrolein	ND	10	µg/L							
Acrylonitrile	ND	5.0	µg/L							V-05
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-05
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
2-Chloroethyl Vinyl Ether	ND	10	µg/L							V-05
Chloroform	ND	2.0	µg/L							V-34
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							V-34
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
Dichlorofluoromethane (Freon 21)	ND	1.0	µg/L							V-05
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Difluorochloromethane (Freon 22)	ND	1.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-05
Ethanol	ND	50	µg/L							

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342602 - SW-846 5030B
Blank (B342602-BLK1)

Prepared: 06/08/23 Analyzed: 06/09/23

Ethyl Acetate	ND	10	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Iodomethane	ND	20	µg/L							L-04, V-05
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							V-05
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							V-05
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,3-Trimethylbenzene	ND	0.50	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Acetate	ND	20	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	26.2		µg/L	25.0		105	70-130			
Surrogate: Toluene-d8	25.4		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	23.6		µg/L	25.0		94.4	70-130			

LCS (B342602-BS1)

Prepared: 06/08/23 Analyzed: 06/09/23

Acetone	78.9	50	µg/L	100		78.9	70-160			V-05 †
Acrolein	84.0	10	µg/L	100		84.0	70-130			
Acrylonitrile	7.71	5.0	µg/L	10.0		77.1	70-130			V-05
tert-Amyl Methyl Ether (TAME)	9.95	0.50	µg/L	10.0		99.5	70-130			
Benzene	11.2	1.0	µg/L	10.0		112	70-130			
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Bromochloromethane	12.7	1.0	µg/L	10.0		127	70-130			V-20
Bromodichloromethane	10.6	0.50	µg/L	10.0		106	70-130			
Bromoform	8.52	1.0	µg/L	10.0		85.2	70-130			
Bromomethane	8.65	2.0	µg/L	10.0		86.5	40-160			†
2-Butanone (MEK)	102	20	µg/L	100		102	40-160			†

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342602 - SW-846 5030B										
LCS (B342602-BS1)					Prepared: 06/08/23 Analyzed: 06/09/23					
tert-Butyl Alcohol (TBA)	62.0	20	µg/L	100		62.0	40-160			V-05 †
n-Butylbenzene	11.1	1.0	µg/L	10.0		111	70-130			
sec-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
tert-Butylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
tert-Butyl Ethyl Ether (TBEE)	11.0	0.50	µg/L	10.0		110	70-130			
Carbon Disulfide	98.4	5.0	µg/L	100		98.4	70-130			
Carbon Tetrachloride	10.9	5.0	µg/L	10.0		109	70-130			
Chlorobenzene	9.82	1.0	µg/L	10.0		98.2	70-130			
Chlorodibromomethane	10.3	0.50	µg/L	10.0		103	70-130			
Chloroethane	9.07	2.0	µg/L	10.0		90.7	70-130			
2-Chloroethyl Vinyl Ether	65.4	10	µg/L	100		65.4 *	70-130			L-07, V-05
Chloroform	11.2	2.0	µg/L	10.0		112	70-130			
Chloromethane	8.98	2.0	µg/L	10.0		89.8	40-160			V-34 †
2-Chlorotoluene	9.22	1.0	µg/L	10.0		92.2	70-130			
4-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130			
Cyclohexane	11.9	5.0	µg/L	10.0		119	70-130			V-20
1,2-Dibromo-3-chloropropane (DBCP)	8.39	5.0	µg/L	10.0		83.9	70-130			
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0		102	70-130			
Dibromomethane	10.3	1.0	µg/L	10.0		103	70-130			
1,2-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130			
1,4-Dichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
trans-1,4-Dichloro-2-butene	8.37	2.0	µg/L	10.0		83.7	70-130			
Dichlorodifluoromethane (Freon 12)	9.50	2.0	µg/L	10.0		95.0	40-160			V-34 †
1,1-Dichloroethane	11.9	1.0	µg/L	10.0		119	70-130			
1,2-Dichloroethane	10.3	1.0	µg/L	10.0		103	70-130			
1,1-Dichloroethylene	8.41	1.0	µg/L	10.0		84.1	70-130			
cis-1,2-Dichloroethylene	12.1	1.0	µg/L	10.0		121	70-130			
trans-1,2-Dichloroethylene	11.7	1.0	µg/L	10.0		117	70-130			
Dichlorofluoromethane (Freon 21)	8.06	1.0	µg/L	10.0		80.6	70-130			V-05
1,2-Dichloropropane	11.3	1.0	µg/L	10.0		113	70-130			
1,3-Dichloropropane	10.7	0.50	µg/L	10.0		107	70-130			
2,2-Dichloropropane	11.1	1.0	µg/L	10.0		111	40-130			†
1,1-Dichloropropene	11.3	2.0	µg/L	10.0		113	70-130			
cis-1,3-Dichloropropene	11.6	0.50	µg/L	10.0		116	70-130			
trans-1,3-Dichloropropene	11.4	0.50	µg/L	10.0		114	70-130			
Diethyl Ether	8.69	2.0	µg/L	10.0		86.9	70-130			
Difluorochloromethane (Freon 22)	11.9	1.0	µg/L	10.0		119	70-130			
Diisopropyl Ether (DIPE)	12.8	0.50	µg/L	10.0		128	70-130			V-20
1,4-Dioxane	83.1	50	µg/L	100		83.1	40-130			V-05 †
Ethanol	99.8	50	µg/L	100		99.8	40-160			
Ethyl Acetate	12.6	10	µg/L	10.0		126	70-130			
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130			
Hexachlorobutadiene	11.1	0.60	µg/L	10.0		111	70-130			
2-Hexanone (MBK)	112	10	µg/L	100		112	70-160			†
Iodomethane	66.0	20	µg/L	100		66.0 *	70-130			L-04, V-05
Isopropylbenzene (Cumene)	9.89	1.0	µg/L	10.0		98.9	70-130			
p-Isopropyltoluene (p-Cymene)	10.4	1.0	µg/L	10.0		104	70-130			
Methyl Acetate	7.46	1.0	µg/L	10.0		74.6	70-130			V-05
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.0		101	70-130			
Methyl Cyclohexane	10.6	1.0	µg/L	10.0		106	70-130			
Methylene Chloride	9.04	5.0	µg/L	10.0		90.4	70-130			

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342602 - SW-846 5030B										
LCS (B342602-BS1)										
Prepared: 06/08/23 Analyzed: 06/09/23										
4-Methyl-2-pentanone (MIBK)	116	10	µg/L	100		116	70-160			†
Naphthalene	7.95	2.0	µg/L	10.0		79.5	40-130			†
n-Propylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
Styrene	10.2	1.0	µg/L	10.0		102	70-130			
1,1,1,2-Tetrachloroethane	9.83	1.0	µg/L	10.0		98.3	70-130			
1,1,2,2-Tetrachloroethane	9.34	0.50	µg/L	10.0		93.4	70-130			
Tetrachloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
Tetrahydrofuran	11.6	10	µg/L	10.0		116	70-130			
Toluene	10.9	1.0	µg/L	10.0		109	70-130			
1,2,3-Trichlorobenzene	8.50	5.0	µg/L	10.0		85.0	70-130			
1,2,4-Trichlorobenzene	9.11	1.0	µg/L	10.0		91.1	70-130			
1,3,5-Trichlorobenzene	9.19	1.0	µg/L	10.0		91.9	70-130			
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.0		110	70-130			
1,1,2-Trichloroethane	10.3	1.0	µg/L	10.0		103	70-130			
Trichloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Trichlorofluoromethane (Freon 11)	8.08	2.0	µg/L	10.0		80.8	70-130			V-05
1,2,3-Trichloropropane	9.72	2.0	µg/L	10.0		97.2	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.60	1.0	µg/L	10.0		86.0	70-130			
1,2,3-Trimethylbenzene	9.79	0.50	µg/L	10.0		97.9	70-130			
1,2,4-Trimethylbenzene	10.6	1.0	µg/L	10.0		106	70-130			
1,3,5-Trimethylbenzene	9.90	1.0	µg/L	10.0		99.0	70-130			
Vinyl Acetate	145	20	µg/L	100		145	* 70-130			L-02, V-20
Vinyl Chloride	12.2	2.0	µg/L	10.0		122	40-160			†
m+p Xylene	20.5	2.0	µg/L	20.0		103	70-130			
o-Xylene	10.3	1.0	µg/L	10.0		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.2		µg/L	25.0		105	70-130			
Surrogate: Toluene-d8	25.5		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	24.4		µg/L	25.0		97.6	70-130			
LCS Dup (B342602-BSD1)										
Prepared: 06/08/23 Analyzed: 06/09/23										
Acetone	80.7	50	µg/L	100		80.7	70-160	2.23	25	V-05 †
Acrolein	89.2	10	µg/L	100		89.2	70-130	6.00	25	
Acrylonitrile	8.03	5.0	µg/L	10.0		80.3	70-130	4.07	25	V-05
tert-Amyl Methyl Ether (TAME)	10.6	0.50	µg/L	10.0		106	70-130	6.23	25	
Benzene	11.3	1.0	µg/L	10.0		113	70-130	1.15	25	
Bromobenzene	10.8	1.0	µg/L	10.0		108	70-130	2.52	25	
Bromochloromethane	13.2	1.0	µg/L	10.0		132	* 70-130	3.32	25	L-07, V-20
Bromodichloromethane	10.7	0.50	µg/L	10.0		107	70-130	0.658	25	
Bromoform	9.11	1.0	µg/L	10.0		91.1	70-130	6.69	25	
Bromomethane	9.35	2.0	µg/L	10.0		93.5	40-160	7.78	25	†
2-Butanone (MEK)	112	20	µg/L	100		112	40-160	9.33	25	†
tert-Butyl Alcohol (TBA)	70.2	20	µg/L	100		70.2	40-160	12.4	25	V-05 †
n-Butylbenzene	11.3	1.0	µg/L	10.0		113	70-130	2.23	25	
sec-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130	1.67	25	
tert-Butylbenzene	10.8	1.0	µg/L	10.0		108	70-130	0.933	25	
tert-Butyl Ethyl Ether (TBEE)	11.4	0.50	µg/L	10.0		114	70-130	3.13	25	
Carbon Disulfide	99.5	5.0	µg/L	100		99.5	70-130	1.12	25	
Carbon Tetrachloride	11.2	5.0	µg/L	10.0		112	70-130	2.98	25	
Chlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	4.38	25	
Chlorodibromomethane	10.5	0.50	µg/L	10.0		105	70-130	1.73	25	
Chloroethane	9.41	2.0	µg/L	10.0		94.1	70-130	3.68	25	
2-Chloroethyl Vinyl Ether	70.0	10	µg/L	100		70.0	70-130	6.91	25	V-05

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QUALITY CONTROL
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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342602 - SW-846 5030B										
LCS Dup (B342602-BSD1)					Prepared: 06/08/23 Analyzed: 06/09/23					
Chloroform	11.6	2.0	µg/L	10.0		116	70-130	3.42	25	
Chloromethane	10.4	2.0	µg/L	10.0		104	40-160	14.3	25	V-34 †
2-Chlorotoluene	9.48	1.0	µg/L	10.0		94.8	70-130	2.78	25	
4-Chlorotoluene	10.3	1.0	µg/L	10.0		103	70-130	1.86	25	
Cyclohexane	12.3	5.0	µg/L	10.0		123	70-130	3.56	25	V-20
1,2-Dibromo-3-chloropropane (DBCP)	9.32	5.0	µg/L	10.0		93.2	70-130	10.5	25	
1,2-Dibromoethane (EDB)	10.5	0.50	µg/L	10.0		105	70-130	2.61	25	
Dibromomethane	10.2	1.0	µg/L	10.0		102	70-130	0.684	25	
1,2-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	3.79	25	
1,3-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130	2.87	25	
1,4-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	2.08	25	
trans-1,4-Dichloro-2-butene	8.95	2.0	µg/L	10.0		89.5	70-130	6.70	25	
Dichlorodifluoromethane (Freon 12)	9.61	2.0	µg/L	10.0		96.1	40-160	1.15	25	V-34 †
1,1-Dichloroethane	12.5	1.0	µg/L	10.0		125	70-130	4.51	25	
1,2-Dichloroethane	10.6	1.0	µg/L	10.0		106	70-130	2.97	25	
1,1-Dichloroethylene	8.54	1.0	µg/L	10.0		85.4	70-130	1.53	25	
cis-1,2-Dichloroethylene	12.3	1.0	µg/L	10.0		123	70-130	1.23	25	
trans-1,2-Dichloroethylene	12.0	1.0	µg/L	10.0		120	70-130	2.44	25	
Dichlorofluoromethane (Freon 21)	8.24	1.0	µg/L	10.0		82.4	70-130	2.21	25	V-05
1,2-Dichloropropane	11.7	1.0	µg/L	10.0		117	70-130	3.38	25	
1,3-Dichloropropane	11.1	0.50	µg/L	10.0		111	70-130	3.77	25	
2,2-Dichloropropane	11.3	1.0	µg/L	10.0		113	40-130	2.23	25	†
1,1-Dichloropropene	11.8	2.0	µg/L	10.0		118	70-130	4.58	25	
cis-1,3-Dichloropropene	12.0	0.50	µg/L	10.0		120	70-130	4.07	25	
trans-1,3-Dichloropropene	11.4	0.50	µg/L	10.0		114	70-130	0.527	25	
Diethyl Ether	8.90	2.0	µg/L	10.0		89.0	70-130	2.39	25	
Difluorochloromethane (Freon 22)	12.0	1.0	µg/L	10.0		120	70-130	0.838	25	
Diisopropyl Ether (DIPE)	13.1	0.50	µg/L	10.0		131	* 70-130	2.40	25	L-07, V-20
1,4-Dioxane	84.7	50	µg/L	100		84.7	40-130	1.92	50	V-05 † ‡
Ethanol	88.7	50	µg/L	100		88.7	40-160	11.9	25	
Ethyl Acetate	13.6	10	µg/L	10.0		136	* 70-130	7.49	25	L-07
Ethylbenzene	10.7	1.0	µg/L	10.0		107	70-130	1.98	25	
Hexachlorobutadiene	11.9	0.60	µg/L	10.0		119	70-130	6.71	25	
2-Hexanone (MBK)	118	10	µg/L	100		118	70-160	5.07	25	†
Iodomethane	64.6	20	µg/L	100		64.6	* 70-130	2.24	25	L-04, V-05
Isopropylbenzene (Cumene)	10.2	1.0	µg/L	10.0		102	70-130	3.28	25	
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0		108	70-130	3.11	25	
Methyl Acetate	8.03	1.0	µg/L	10.0		80.3	70-130	7.36	25	V-05
Methyl tert-Butyl Ether (MTBE)	10.5	1.0	µg/L	10.0		105	70-130	3.98	25	
Methyl Cyclohexane	10.8	1.0	µg/L	10.0		108	70-130	1.40	25	
Methylene Chloride	9.24	5.0	µg/L	10.0		92.4	70-130	2.19	25	
4-Methyl-2-pentanone (MIBK)	122	10	µg/L	100		122	70-160	4.62	25	†
Naphthalene	9.12	2.0	µg/L	10.0		91.2	40-130	13.7	25	†
n-Propylbenzene	10.6	1.0	µg/L	10.0		106	70-130	1.62	25	
Styrene	10.6	1.0	µg/L	10.0		106	70-130	2.98	25	
1,1,1,2-Tetrachloroethane	10.1	1.0	µg/L	10.0		101	70-130	2.41	25	
1,1,2,2-Tetrachloroethane	9.88	0.50	µg/L	10.0		98.8	70-130	5.62	25	
Tetrachloroethylene	10.7	1.0	µg/L	10.0		107	70-130	0.840	25	
Tetrahydrofuran	11.5	10	µg/L	10.0		115	70-130	0.952	25	
Toluene	10.9	1.0	µg/L	10.0		109	70-130	0.368	25	
1,2,3-Trichlorobenzene	9.71	5.0	µg/L	10.0		97.1	70-130	13.3	25	
1,2,4-Trichlorobenzene	9.78	1.0	µg/L	10.0		97.8	70-130	7.09	25	

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QUALITY CONTROL
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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342602 - SW-846 5030B										
LCS Dup (B342602-BSD1)										
Prepared: 06/08/23 Analyzed: 06/09/23										
1,3,5-Trichlorobenzene	9.75	1.0	µg/L	10.0		97.5	70-130	5.91	25	
1,1,1-Trichloroethane	11.3	1.0	µg/L	10.0		113	70-130	3.41	25	
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.0		109	70-130	5.37	25	
Trichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	1.05	25	
Trichlorofluoromethane (Freon 11)	8.12	2.0	µg/L	10.0		81.2	70-130	0.494	25	V-05
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0		102	70-130	4.92	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.64	1.0	µg/L	10.0		86.4	70-130	0.464	25	
1,2,3-Trimethylbenzene	10.4	0.50	µg/L	10.0		104	70-130	5.85	25	
1,2,4-Trimethylbenzene	11.0	1.0	µg/L	10.0		110	70-130	3.53	25	
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.0		103	70-130	3.96	25	
Vinyl Acetate	152	20	µg/L	100		152	* 70-130	4.76	25	V-20, L-02
Vinyl Chloride	12.6	2.0	µg/L	10.0		126	40-160	3.39	25	†
m+p Xylene	20.7	2.0	µg/L	20.0		104	70-130	0.873	25	
o-Xylene	10.5	1.0	µg/L	10.0		105	70-130	2.21	25	
Surrogate: 1,2-Dichloroethane-d4	26.8		µg/L	25.0		107	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.6		µg/L	25.0		98.6	70-130			
Matrix Spike (B342602-MS1)										
Source: 23F0714-05 Prepared: 06/08/23 Analyzed: 06/09/23										
Acetone	69.2	50	µg/L	100	ND	69.2	* 70-130			MS-24, V-05
Acrylonitrile	6.90	5.0	µg/L	10.0	ND	69.0	* 70-130			MS-24, V-05
tert-Amyl Methyl Ether (TAME)	9.12	0.50	µg/L	10.0	ND	91.2	70-130			
Benzene	10.4	1.0	µg/L	10.0	ND	104	70-130			
Bromobenzene	10.1	1.0	µg/L	10.0	ND	101	70-130			
Bromochloromethane	12.2	1.0	µg/L	10.0	ND	122	70-130			V-20
Bromodichloromethane	9.68	0.50	µg/L	10.0	ND	96.8	70-130			
Bromoform	8.04	1.0	µg/L	10.0	ND	80.4	70-130			
Bromomethane	5.75	2.0	µg/L	10.0	ND	57.5	* 70-130			MS-24
2-Butanone (MEK)	94.8	20	µg/L	100	ND	94.8	70-130			
tert-Butyl Alcohol (TBA)	57.4	20	µg/L	100	ND	57.4	* 70-130			MS-07A, V-05
n-Butylbenzene	10.2	1.0	µg/L	10.0	ND	102	70-130			
sec-Butylbenzene	10.2	1.0	µg/L	10.0	ND	102	70-130			
tert-Butylbenzene	10.4	1.0	µg/L	10.0	ND	104	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.2	0.50	µg/L	10.0	ND	102	70-130			
Carbon Disulfide	96.9	5.0	µg/L	100	ND	96.9	70-130			
Carbon Tetrachloride	10.4	5.0	µg/L	10.0	ND	104	70-130			
Chlorobenzene	9.54	1.0	µg/L	10.0	ND	95.4	70-130			
Chlorodibromomethane	9.54	0.50	µg/L	10.0	ND	95.4	70-130			
Chloroethane	8.54	2.0	µg/L	10.0	ND	85.4	70-130			
Chloroform	10.7	2.0	µg/L	10.0	ND	107	70-130			
Chloromethane	5.40	2.0	µg/L	10.0	ND	54.0	* 70-130			V-34, MS-23, R-06
2-Chlorotoluene	9.05	1.0	µg/L	10.0	ND	90.5	70-130			
4-Chlorotoluene	9.61	1.0	µg/L	10.0	ND	96.1	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.66	5.0	µg/L	10.0	ND	76.6	70-130			
1,2-Dibromoethane (EDB)	9.54	0.50	µg/L	10.0	ND	95.4	70-130			
Dibromomethane	9.74	1.0	µg/L	10.0	ND	97.4	70-130			
1,2-Dichlorobenzene	9.54	1.0	µg/L	10.0	ND	95.4	70-130			
1,3-Dichlorobenzene	9.78	1.0	µg/L	10.0	ND	97.8	70-130			
1,4-Dichlorobenzene	9.53	1.0	µg/L	10.0	ND	95.3	70-130			
trans-1,4-Dichloro-2-butene	7.53	2.0	µg/L	10.0	ND	75.3	70-130			
Dichlorodifluoromethane (Freon 12)	9.12	2.0	µg/L	10.0	ND	91.2	70-130			V-34

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342602 - SW-846 5030B										
Matrix Spike (B342602-MS1)	Source: 23F0714-05			Prepared: 06/08/23 Analyzed: 06/09/23						
1,1-Dichloroethane	11.6	1.0	µg/L	10.0	ND	116	70-130			
1,2-Dichloroethane	9.72	1.0	µg/L	10.0	ND	97.2	70-130			
1,1-Dichloroethylene	7.99	1.0	µg/L	10.0	ND	79.9	70-130			
cis-1,2-Dichloroethylene	11.1	1.0	µg/L	10.0	ND	111	70-130			
trans-1,2-Dichloroethylene	11.2	1.0	µg/L	10.0	ND	112	70-130			
1,2-Dichloropropane	11.1	1.0	µg/L	10.0	ND	111	70-130			
1,3-Dichloropropane	9.79	0.50	µg/L	10.0	ND	97.9	70-130			
2,2-Dichloropropane	8.60	1.0	µg/L	10.0	ND	86.0	70-130			
1,1-Dichloropropene	11.0	2.0	µg/L	10.0	ND	110	70-130			
cis-1,3-Dichloropropene	10.4	0.50	µg/L	10.0	ND	104	70-130			
trans-1,3-Dichloropropene	9.86	0.50	µg/L	10.0	ND	98.6	70-130			
Diethyl Ether	7.93	2.0	µg/L	10.0	ND	79.3	70-130			
Diisopropyl Ether (DIPE)	11.8	0.50	µg/L	10.0	ND	118	70-130			V-20
1,4-Dioxane	64.9	50	µg/L	100	ND	64.9	* 70-130			MS-24, V-05
Ethylbenzene	10.1	1.0	µg/L	10.0	ND	101	70-130			
Hexachlorobutadiene	9.35	0.60	µg/L	10.0	ND	93.5	70-130			
2-Hexanone (MBK)	105	10	µg/L	100	ND	105	70-130			
Isopropylbenzene (Cumene)	9.56	1.0	µg/L	10.0	ND	95.6	70-130			
p-Isopropyltoluene (p-Cymene)	9.92	1.0	µg/L	10.0	ND	99.2	70-130			
Methyl Acetate	6.03	1.0	µg/L	10.0	ND	60.3	* 70-130			MS-07A, V-05
Methyl tert-Butyl Ether (MTBE)	9.39	1.0	µg/L	10.0	ND	93.9	70-130			
Methyl Cyclohexane	10.1	1.0	µg/L	10.0	ND	101	70-130			
Methylene Chloride	8.59	5.0	µg/L	10.0	ND	85.9	70-130			
4-Methyl-2-pentanone (MIBK)	106	10	µg/L	100	ND	106	70-130			
Naphthalene	6.54	2.0	µg/L	10.0	ND	65.4	* 70-130			MS-24
n-Propylbenzene	9.82	1.0	µg/L	10.0	ND	98.2	70-130			
Styrene	9.65	1.0	µg/L	10.0	ND	96.5	70-130			
1,1,1,2-Tetrachloroethane	9.26	1.0	µg/L	10.0	ND	92.6	70-130			
1,1,2,2-Tetrachloroethane	8.79	0.50	µg/L	10.0	ND	87.9	70-130			
Tetrachloroethylene	9.94	1.0	µg/L	10.0	ND	99.4	70-130			
Tetrahydrofuran	9.69	10	µg/L	10.0	ND	96.9	70-130			J
Toluene	10.4	1.0	µg/L	10.0	ND	104	70-130			
1,2,3-Trichlorobenzene	6.34	5.0	µg/L	10.0	ND	63.4	* 70-130			MS-24
1,2,4-Trichlorobenzene	7.57	1.0	µg/L	10.0	ND	75.7	70-130			
1,3,5-Trichlorobenzene	8.21	1.0	µg/L	10.0	ND	82.1	70-130			
1,1,1-Trichloroethane	10.6	1.0	µg/L	10.0	ND	106	70-130			
1,1,2-Trichloroethane	9.75	1.0	µg/L	10.0	ND	97.5	70-130			
Trichloroethylene	10.6	1.0	µg/L	10.0	ND	106	70-130			
Trichlorofluoromethane (Freon 11)	7.77	2.0	µg/L	10.0	ND	77.7	70-130			V-05
1,2,3-Trichloropropane	9.11	2.0	µg/L	10.0	ND	91.1	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.05	1.0	µg/L	10.0	ND	80.5	70-130			
1,2,4-Trimethylbenzene	10.6	1.0	µg/L	10.0	ND	106	70-130			
1,3,5-Trimethylbenzene	9.68	1.0	µg/L	10.0	ND	96.8	70-130			
Vinyl Chloride	11.6	2.0	µg/L	10.0	ND	116	70-130			
m+p Xylene	19.7	2.0	µg/L	20.0	ND	98.6	70-130			
o-Xylene	9.91	1.0	µg/L	10.0	ND	99.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	26.3		µg/L	25.0		105	70-130			
Surrogate: Toluene-d8	25.4		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0		98.8	70-130			

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342602 - SW-846 5030B										
Matrix Spike Dup (B342602-MSD1)	Source: 23F0714-05			Prepared: 06/08/23 Analyzed: 06/09/23						
Acetone	73.0	50	µg/L	100	ND	73.0	70-130	5.42	30	V-05
Acrylonitrile	7.29	5.0	µg/L	10.0	ND	72.9	70-130	5.50	30	V-05
tert-Amyl Methyl Ether (TAME)	9.78	0.50	µg/L	10.0	ND	97.8	70-130	6.98	30	
Benzene	10.7	1.0	µg/L	10.0	ND	107	70-130	3.03	30	
Bromobenzene	10.4	1.0	µg/L	10.0	ND	104	70-130	3.02	30	
Bromochloromethane	12.6	1.0	µg/L	10.0	ND	126	70-130	2.83	30	V-20
Bromodichloromethane	10.2	0.50	µg/L	10.0	ND	102	70-130	5.33	30	
Bromoform	8.50	1.0	µg/L	10.0	ND	85.0	70-130	5.56	30	
Bromomethane	7.68	2.0	µg/L	10.0	ND	76.8	70-130	28.7	30	
2-Butanone (MEK)	94.3	20	µg/L	100	ND	94.3	70-130	0.529	30	
tert-Butyl Alcohol (TBA)	62.9	20	µg/L	100	ND	62.9 *	70-130	9.08	30	MS-07A, V-05
n-Butylbenzene	10.3	1.0	µg/L	10.0	ND	103	70-130	1.46	30	
sec-Butylbenzene	10.3	1.0	µg/L	10.0	ND	103	70-130	0.977	30	
tert-Butylbenzene	10.2	1.0	µg/L	10.0	ND	102	70-130	2.43	30	
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0	ND	107	70-130	5.36	30	
Carbon Disulfide	95.8	5.0	µg/L	100	ND	95.8	70-130	1.19	30	
Carbon Tetrachloride	10.6	5.0	µg/L	10.0	ND	106	70-130	1.90	30	
Chlorobenzene	9.75	1.0	µg/L	10.0	ND	97.5	70-130	2.18	30	
Chlorodibromomethane	10.2	0.50	µg/L	10.0	ND	102	70-130	6.78	30	
Chloroethane	9.65	2.0	µg/L	10.0	ND	96.5	70-130	12.2	30	
Chloroform	11.0	2.0	µg/L	10.0	ND	110	70-130	2.58	30	
Chloromethane	7.32	2.0	µg/L	10.0	ND	73.2	70-130	30.2 *	30	R-06, V-34
2-Chlorotoluene	9.09	1.0	µg/L	10.0	ND	90.9	70-130	0.441	30	
4-Chlorotoluene	9.85	1.0	µg/L	10.0	ND	98.5	70-130	2.47	30	
1,2-Dibromo-3-chloropropane (DBCP)	8.78	5.0	µg/L	10.0	ND	87.8	70-130	13.6	30	
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0	ND	102	70-130	6.20	30	
Dibromomethane	10.4	1.0	µg/L	10.0	ND	104	70-130	6.27	30	
1,2-Dichlorobenzene	9.89	1.0	µg/L	10.0	ND	98.9	70-130	3.60	30	
1,3-Dichlorobenzene	9.98	1.0	µg/L	10.0	ND	99.8	70-130	2.02	30	
1,4-Dichlorobenzene	9.70	1.0	µg/L	10.0	ND	97.0	70-130	1.77	30	
trans-1,4-Dichloro-2-butene	7.80	2.0	µg/L	10.0	ND	78.0	70-130	3.52	30	
Dichlorodifluoromethane (Freon 12)	9.14	2.0	µg/L	10.0	ND	91.4	70-130	0.219	30	V-34
1,1-Dichloroethane	11.9	1.0	µg/L	10.0	ND	119	70-130	2.56	30	
1,2-Dichloroethane	10.0	1.0	µg/L	10.0	ND	100	70-130	3.24	30	
1,1-Dichloroethylene	8.03	1.0	µg/L	10.0	ND	80.3	70-130	0.499	30	
cis-1,2-Dichloroethylene	11.5	1.0	µg/L	10.0	ND	115	70-130	3.18	30	
trans-1,2-Dichloroethylene	11.4	1.0	µg/L	10.0	ND	114	70-130	1.68	30	
1,2-Dichloropropane	11.2	1.0	µg/L	10.0	ND	112	70-130	0.898	30	
1,3-Dichloropropane	10.8	0.50	µg/L	10.0	ND	108	70-130	9.44	30	
2,2-Dichloropropane	8.92	1.0	µg/L	10.0	ND	89.2	70-130	3.65	30	
1,1-Dichloropropene	11.1	2.0	µg/L	10.0	ND	111	70-130	1.09	30	
cis-1,3-Dichloropropene	11.0	0.50	µg/L	10.0	ND	110	70-130	5.89	30	
trans-1,3-Dichloropropene	10.9	0.50	µg/L	10.0	ND	109	70-130	9.74	30	
Diethyl Ether	8.05	2.0	µg/L	10.0	ND	80.5	70-130	1.50	30	
Diisopropyl Ether (DIPE)	12.2	0.50	µg/L	10.0	ND	122	70-130	3.67	30	V-20
1,4-Dioxane	78.9	50	µg/L	100	ND	78.9	70-130	19.5	30	V-05
Ethylbenzene	10.0	1.0	µg/L	10.0	ND	100	70-130	0.199	30	
Hexachlorobutadiene	10.2	0.60	µg/L	10.0	ND	102	70-130	8.21	30	
2-Hexanone (MBK)	111	10	µg/L	100	ND	111	70-130	5.82	30	
Isopropylbenzene (Cumene)	9.69	1.0	µg/L	10.0	ND	96.9	70-130	1.35	30	
p-Isopropyltoluene (p-Cymene)	10.0	1.0	µg/L	10.0	ND	100	70-130	1.00	30	
Methyl Acetate	6.25	1.0	µg/L	10.0	ND	62.5 *	70-130	3.58	30	MS-07A, V-05

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342602 - SW-846 5030B										
Matrix Spike Dup (B342602-MSD1)	Source: 23F0714-05			Prepared: 06/08/23 Analyzed: 06/09/23						
Methyl tert-Butyl Ether (MTBE)	10.1	1.0	µg/L	10.0	ND	101	70-130	7.29	30	
Methyl Cyclohexane	10.5	1.0	µg/L	10.0	ND	105	70-130	3.99	30	
Methylene Chloride	9.05	5.0	µg/L	10.0	ND	90.5	70-130	5.22	30	
4-Methyl-2-pentanone (MIBK)	114	10	µg/L	100	ND	114	70-130	7.23	30	
Naphthalene	7.92	2.0	µg/L	10.0	ND	79.2	70-130	19.1	30	
n-Propylbenzene	9.89	1.0	µg/L	10.0	ND	98.9	70-130	0.710	30	
Styrene	9.76	1.0	µg/L	10.0	ND	97.6	70-130	1.13	30	
1,1,1,2-Tetrachloroethane	9.65	1.0	µg/L	10.0	ND	96.5	70-130	4.12	30	
1,1,2,2-Tetrachloroethane	9.07	0.50	µg/L	10.0	ND	90.7	70-130	3.14	30	
Tetrachloroethylene	10.4	1.0	µg/L	10.0	ND	104	70-130	4.33	30	
Tetrahydrofuran	10.2	10	µg/L	10.0	ND	102	70-130	5.52	30	
Toluene	10.4	1.0	µg/L	10.0	ND	104	70-130	0.577	30	
1,2,3-Trichlorobenzene	8.55	5.0	µg/L	10.0	ND	85.5	70-130	29.7	30	
1,2,4-Trichlorobenzene	8.99	1.0	µg/L	10.0	ND	89.9	70-130	17.1	30	
1,3,5-Trichlorobenzene	9.02	1.0	µg/L	10.0	ND	90.2	70-130	9.40	30	
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0	ND	108	70-130	2.61	30	
1,1,2-Trichloroethane	10.5	1.0	µg/L	10.0	ND	105	70-130	7.12	30	
Trichloroethylene	10.3	1.0	µg/L	10.0	ND	103	70-130	2.87	30	
Trichlorofluoromethane (Freon 11)	7.63	2.0	µg/L	10.0	ND	76.3	70-130	1.82	30	V-05
1,2,3-Trichloropropane	9.52	2.0	µg/L	10.0	ND	95.2	70-130	4.40	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.06	1.0	µg/L	10.0	ND	80.6	70-130	0.124	30	
1,2,4-Trimethylbenzene	10.1	1.0	µg/L	10.0	ND	101	70-130	5.13	30	
1,3,5-Trimethylbenzene	9.75	1.0	µg/L	10.0	ND	97.5	70-130	0.721	30	
Vinyl Chloride	12.0	2.0	µg/L	10.0	ND	120	70-130	3.56	30	
m+p Xylene	19.8	2.0	µg/L	20.0	ND	99.2	70-130	0.606	20	
o-Xylene	9.97	1.0	µg/L	10.0	ND	99.7	70-130	0.604	30	
Surrogate: 1,2-Dichloroethane-d4	26.5		µg/L	25.0		106	70-130			
Surrogate: Toluene-d8	25.1		µg/L	25.0		100	70-130			
Surrogate: 4-Bromofluorobenzene	24.7		µg/L	25.0		98.8	70-130			

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QUALITY CONTROL
1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342978 - SW-846 3510C										
Blank (B342978-BLK1)				Prepared: 06/12/23 Analyzed: 06/21/23						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	2.84		µg/L	10.0		28.4	15-110			
LCS (B342978-BS1)				Prepared: 06/12/23 Analyzed: 06/21/23						
1,4-Dioxane	9.95	0.20	µg/L	10.0		99.5	40-140			
Surrogate: 1,4-Dioxane-d8	3.21		µg/L	10.0		32.1	15-110			
LCS Dup (B342978-BSD1)				Prepared: 06/12/23 Analyzed: 06/21/23						
1,4-Dioxane	10.6	0.20	µg/L	10.0		106	40-140	6.00	30	
Surrogate: 1,4-Dioxane-d8	3.12		µg/L	10.0		31.2	15-110			
Matrix Spike (B342978-MS1)				Source: 23F0714-05		Prepared: 06/12/23 Analyzed: 06/21/23				
1,4-Dioxane	10.2	0.20	µg/L	10.2	ND	101	40-140			
Surrogate: 1,4-Dioxane-d8	2.43		µg/L	10.2		23.9	15-110			
Matrix Spike Dup (B342978-MSD1)				Source: 23F0714-05		Prepared: 06/12/23 Analyzed: 06/21/23				
1,4-Dioxane	10.9	0.20	µg/L	10.1	ND	108	40-140	6.40	20	
Surrogate: 1,4-Dioxane-d8	3.02		µg/L	10.1		29.9	15-110			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
MS-24	Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	ME,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
Dibromomethane	ME,NH,VA,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	ME,NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY

SW-846 8270E in Water

1,4-Dioxane NY,NH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2023

Contact: <https://www.pacelabs.com/contact-us/contact-environmental-sciences/>

Company Name: **EPA Engineering**

Address: **266 W. Jefferson St. Syracuse, NY**

Phone: **315 390 1346 (sample)**

Project Name: **Town & Country Dry Cleaners**

Project Location: **Brighton, NY**

Project Number: **1602232410020 (EPA) 828149 (NYSDEC#)**

Project Manager: **John Oliver (EPA) Kyle Stuckey (PACE)**

Pace Analytical Quote Name/Number: **Callout # 147421**

Invoice Recipient:

Sampled By: **Monahan Gilkey**

Pace Analytical Work Order #

Client Sample ID / Description

Beginning Date/Time

Ending Date/Time

Composite

Grab

Matrix Code

Conc Code

Analysis Requested

Field Filtered

Lab to Filter

Field Filtered

Lab to Filter

Matrix Codes:

GW = Ground Water

WW = Waste Water

DW = Drinking Water

A = Air

S = Soil

SL = Sludge

SOL = Solid

O = Other (please define)

Preservation Codes:

I = Iced

H = HCL

M = Methanol

N = Nitric Acid

S = Sulfuric Acid

B = Sodium Bisulfate

X = Sodium Hydroxide

T = Sodium Thiosulfate

O = Other (please define)

Container Codes:

A = Amber Glass

G = Glass

P = Plastic

ST = Sterile

V = Vial

S = Summa Canister

T = Tedlar Bag

O = Other (please define)

PCB ONLY

Soxhlet

Non Soxhlet

Comments: Extra volume include w/ 828149-mw-17B for MS/MSD

2 coolers were shipped for this chain

Relinquished by: (signature)

Date/Time: 09/06/23

Received by: (signature)

Date/Time: 09/28

Relinquished by: (signature)

Date/Time: 6-7-23

Received by: (signature)

Date/Time:

Relinquished by: (signature)

Date/Time:

Received by: (signature)

Date/Time:

Relinquished by: (signature)

Date/Time:

(https://www.fedex.com/en-us/home.html)

FedEx® Tracking



DELIVERED

Wednesday

6/7/2023 at 9:28 am

Signed for by: A.ALYSSA

↓ Obtain proof of delivery

DELIVERY STATUS

Delivered 

↓ Shipment is 1 of 3 pieces

TRACKING ID

399255505137  

FROM

SYRACUSE, NY US

Label Created

6/6/2023 7:51 AM

PACKAGE RECEIVED BY FEDEX

ROCHESTER, NY

6/6/2023 5:00 PM

IN TRANSIT

WINDSOR LOCKS, CT

6/7/2023 8:14 AM

OUT FOR DELIVERY

WINDSOR LOCKS, CT

6/7/2023 8:26 AM

DELIVERED

East Longmeadow, MA US

Delivered

6/7/2023 at 9:28 AM

↓ View travel history

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F: 413-525-6405
www.pacelabs.com

ENV-FRM-ELON-0001 V05__ Sample Receiving Checklist

Log In Back-Sheet

Login Sample Receipt Checklist - (Rejection Criteria Listing
- Using Acceptance Policy) Any False statement will be
brought to the attention of the Client - True or False

Client EA EngineeringProject Town & Country Dry CleanersMCP/RCP Required N/ADeliverable Package Requirement CAT BLocation Brighton, NYPWSID# (When Applicable) N/A

Arrival Method:

 Courier ☐ Fed Ex ☒ Walk In ☐ Other ☐
Received By / Date / Time AAM / 6-7-23 / 0928Back Sheet By / Date / Time AAM / 6-7-23 / 1101Temperature Method Temp. Gun # 5Temp ☒ 6° C Actual Temperature 4.5 / 32° CRush Samples: Yes / ☒ No NotifyShort Hold: Yes / ☒ No Notify

Notes regarding Samples/COC outside of SOP:

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☒	☐
Trip Blanks	☒	☐
Lab to Filters	☐	☒
COC Legible	☒	☐

COC Included: (Check all included)

 Client ☒ Analysis ☒ Sampler Name ☒
 Project ☒ IDs ☒ Collection Date/Time ☒
All Samples Proper pH: N/A ☐ ☐

Additional Container Notes

[illegible]

June 23, 2023

Moriah Gilkey
NYDEC_EA Engineering, Science & Tech. - NY
269 West Jefferson St.
Syracuse, NY 13202

Project Location: Brighton, NY
Client Job Number:
Project Number: 828149
Laboratory Work Order Number: 23F0975

Enclosed are results of analyses for samples as received by the laboratory on June 8, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle K. Stuckey
Project Manager

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NYDEC_EA Engineering, Science & Tech. - NY
269 West Jefferson St.
Syracuse, NY 13202
ATTN: Moriah Gilkey

REPORT DATE: 6/23/2023

PURCHASE ORDER NUMBER: 147421

PROJECT NUMBER: 828149

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F0975

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Brighton, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
828149-MW-3	23F0975-01	Ground Water		SW-846 8260D	
				SW-846 8270E	
828149-DP-15	23F0975-02	Ground Water		SW-846 8260D	
				SW-846 8270E	
828149-GEMW-2	23F0975-03	Ground Water		SW-846 8260D	
				SW-846 8270E	
828149-DP-18	23F0975-04	Ground Water		SW-846 8260D	
				SW-846 8270E	
828149-DP-20	23F0975-05	Ground Water		SW-846 8260D	
				SW-846 8270E	
828149-DP-19	23F0975-06	Ground Water		SW-846 8260D	
				SW-846 8270E	
828149-MW-19B	23F0975-07	Ground Water		SW-846 8260D	
				SW-846 8270E	
828149-MW-21B	23F0975-08	Ground Water		SW-846 8260D	
				SW-846 8270E	
828149-DP-21	23F0975-09	Ground Water		SW-846 8260D	
				SW-846 8270E	
828149-TB-02	23F0975-10	Trip Blank Water		SW-846 8260D	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8260D**Qualifications:**

PR-08

pH of sample (pH 5) is outside of method specified preservation criteria.

Analyte & Samples(s) Qualified:

23F0975-04[828149-DP-18]

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

23F0975-01[828149-MW-3], 23F0975-02[828149-DP-15]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**Methyl Acetate**

23F0975-01[828149-MW-3], 23F0975-02[828149-DP-15], 23F0975-03[828149-GEMW-2], 23F0975-04[828149-DP-18], 23F0975-05[828149-DP-20], 23F0975-06[828149-DP-19], 23F0975-07[828149-MW-19B], 23F0975-08[828149-MW-21B], 23F0975-09[828149-DP-21], 23F0975-10[828149-TB-02], B342923-BLK1, B342923-BS1, B342923-BSD1, S088989-CCV1

tert-Butyl Alcohol (TBA)

23F0975-01[828149-MW-3], 23F0975-02[828149-DP-15], 23F0975-03[828149-GEMW-2], 23F0975-04[828149-DP-18], 23F0975-05[828149-DP-20], 23F0975-06[828149-DP-19], 23F0975-07[828149-MW-19B], 23F0975-08[828149-MW-21B], 23F0975-09[828149-DP-21], 23F0975-10[828149-TB-02], B342923-BLK1, B342923-BS1, B342923-BSD1, S088989-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**1,2,3-Trichloropropane**

B342923-BS1, B342923-BSD1, S088989-CCV1

Bromomethane

B342923-BS1, B342923-BSD1, S088989-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-MW-3

Sampled: 6/6/2023 09:06

Sample ID: 23F0975-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	2000	80	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Acrylonitrile	ND	200	19	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
tert-Amyl Methyl Ether (TAME)	ND	20	5.3	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Benzene	ND	40	7.4	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Bromobenzene	ND	40	5.9	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Bromochloromethane	ND	40	11	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Bromodichloromethane	ND	20	6.3	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Bromoform	ND	40	16	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Bromomethane	ND	80	53	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
2-Butanone (MEK)	ND	800	67	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
tert-Butyl Alcohol (TBA)	ND	800	170	µg/L	40	V-05	SW-846 8260D	6/12/23	6/13/23 6:14	MFF
n-Butylbenzene	ND	40	6.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
sec-Butylbenzene	ND	40	5.1	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
tert-Butylbenzene	ND	40	5.7	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	20	6.2	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Carbon Disulfide	ND	200	62	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Carbon Tetrachloride	ND	200	6.5	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Chlorobenzene	ND	40	4.8	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Chlorodibromomethane	ND	20	8.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Chloroethane	ND	80	14	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Chloroform	ND	80	5.6	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Chloromethane	ND	80	20	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
2-Chlorotoluene	ND	40	6.2	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
4-Chlorotoluene	ND	40	6.2	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	200	34	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,2-Dibromoethane (EDB)	ND	20	6.4	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Dibromomethane	ND	40	13	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,2-Dichlorobenzene	ND	40	5.2	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,3-Dichlorobenzene	ND	40	5.5	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,4-Dichlorobenzene	ND	40	5.1	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
trans-1,4-Dichloro-2-butene	ND	80	60	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Dichlorodifluoromethane (Freon 12)	ND	80	6.4	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,1-Dichloroethane	ND	40	5.5	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,2-Dichloroethane	ND	40	12	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,1-Dichloroethylene	ND	40	5.6	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
cis-1,2-Dichloroethylene	330	40	5.6	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
trans-1,2-Dichloroethylene	ND	40	6.9	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,2-Dichloropropane	ND	40	7.7	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,3-Dichloropropane	ND	20	4.6	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
2,2-Dichloropropane	ND	40	14	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,1-Dichloropropene	ND	80	6.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
cis-1,3-Dichloropropene	ND	20	6.5	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
trans-1,3-Dichloropropene	ND	20	5.7	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Diethyl Ether	ND	80	5.8	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-MW-3

Sampled: 6/6/2023 09:06

Sample ID: 23F0975-01

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	20	8.1	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,4-Dioxane	ND	2000	720	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Ethylbenzene	ND	40	8.8	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Hexachlorobutadiene	ND	24	19	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
2-Hexanone (MBK)	ND	400	48	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Isopropylbenzene (Cumene)	ND	40	6.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
p-Isopropyltoluene (p-Cymene)	ND	40	5.1	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Methyl Acetate	ND	40	24	µg/L	40	V-05	SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Methyl tert-Butyl Ether (MTBE)	ND	40	6.8	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Methyl Cyclohexane	ND	40	6.2	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Methylene Chloride	ND	200	7.1	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
4-Methyl-2-pentanone (MIBK)	ND	400	53	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Naphthalene	ND	80	15	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
n-Propylbenzene	ND	40	5.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Styrene	ND	40	6.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,1,1,2-Tetrachloroethane	ND	40	6.5	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,1,2,2-Tetrachloroethane	ND	20	5.5	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Tetrachloroethylene	2000	40	6.7	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Tetrahydrofuran	ND	400	20	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Toluene	ND	40	8.9	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,2,3-Trichlorobenzene	ND	200	14	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,2,4-Trichlorobenzene	ND	40	12	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,3,5-Trichlorobenzene	ND	40	8.3	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,1,1-Trichloroethane	ND	40	6.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,1,2-Trichloroethane	ND	40	7.6	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Trichloroethylene	160	40	7.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Trichlorofluoromethane (Freon 11)	ND	80	6.2	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,2,3-Trichloropropane	ND	80	11	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	40	8.3	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,2,4-Trimethylbenzene	ND	40	8.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
1,3,5-Trimethylbenzene	ND	40	6.0	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Vinyl Chloride	ND	80	9.5	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
m+p Xylene	ND	80	20	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
o-Xylene	ND	40	9.7	µg/L	40		SW-846 8260D	6/12/23	6/13/23 6:14	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.9		70-130				6/13/23 6:14			
Toluene-d8	101		70-130				6/13/23 6:14			
4-Bromofluorobenzene	90.4		70-130				6/13/23 6:14			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-MW-3

Sampled: 6/6/2023 09:06

Sample ID: 23F0975-01

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.033	µg/L	1		SW-846 8270E	6/12/23	6/21/23 15:55	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	27.2		15-110				6/21/23 15:55			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-15

Sampled: 6/6/2023 08:48

Sample ID: 23F0975-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1000	40	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Acrylonitrile	ND	100	9.3	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
tert-Amyl Methyl Ether (TAME)	ND	10	2.6	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Benzene	ND	20	3.7	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Bromobenzene	ND	20	3.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Bromochloromethane	ND	20	5.7	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Bromodichloromethane	ND	10	3.2	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Bromoform	ND	20	8.2	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Bromomethane	ND	40	26	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
2-Butanone (MEK)	63	400	34	µg/L	20	J	SW-846 8260D	6/12/23	6/13/23 6:40	MFF
tert-Butyl Alcohol (TBA)	ND	400	85	µg/L	20	V-05	SW-846 8260D	6/12/23	6/13/23 6:40	MFF
n-Butylbenzene	ND	20	3.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
sec-Butylbenzene	ND	20	2.5	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
tert-Butylbenzene	ND	20	2.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	10	3.1	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Carbon Disulfide	ND	100	31	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Carbon Tetrachloride	ND	100	3.3	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Chlorobenzene	ND	20	2.4	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Chlorodibromomethane	ND	10	4.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Chloroethane	ND	40	6.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Chloroform	ND	40	2.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Chloromethane	ND	40	10	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
2-Chlorotoluene	ND	20	3.1	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
4-Chlorotoluene	ND	20	3.1	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	100	17	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,2-Dibromoethane (EDB)	ND	10	3.2	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Dibromomethane	ND	20	6.4	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,2-Dichlorobenzene	ND	20	2.6	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,3-Dichlorobenzene	ND	20	2.7	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,4-Dichlorobenzene	ND	20	2.6	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
trans-1,4-Dichloro-2-butene	ND	40	30	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Dichlorodifluoromethane (Freon 12)	ND	40	3.2	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,1-Dichloroethane	ND	20	2.7	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,2-Dichloroethane	ND	20	6.1	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,1-Dichloroethylene	ND	20	2.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
cis-1,2-Dichloroethylene	88	20	2.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
trans-1,2-Dichloroethylene	ND	20	3.4	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,2-Dichloropropane	ND	20	3.9	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,3-Dichloropropane	ND	10	2.3	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
2,2-Dichloropropane	ND	20	7.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,1-Dichloropropene	ND	40	3.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
cis-1,3-Dichloropropene	ND	10	3.3	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
trans-1,3-Dichloropropene	ND	10	2.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Diethyl Ether	ND	40	2.9	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-15

Sampled: 6/6/2023 08:48

Sample ID: 23F0975-02

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	10	4.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,4-Dioxane	ND	1000	360	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Ethylbenzene	ND	20	4.4	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Hexachlorobutadiene	ND	12	9.4	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
2-Hexanone (MBK)	ND	200	24	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Isopropylbenzene (Cumene)	ND	20	3.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
p-Isopropyltoluene (p-Cymene)	ND	20	2.5	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Methyl Acetate	ND	20	12	µg/L	20	V-05	SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Methyl tert-Butyl Ether (MTBE)	ND	20	3.4	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Methyl Cyclohexane	ND	20	3.1	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Methylene Chloride	ND	100	3.5	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
4-Methyl-2-pentanone (MIBK)	ND	200	26	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Naphthalene	ND	40	7.6	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
n-Propylbenzene	ND	20	2.5	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Styrene	ND	20	3.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,1,1,2-Tetrachloroethane	ND	20	3.2	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,1,2,2-Tetrachloroethane	ND	10	2.7	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Tetrachloroethylene	1200	20	3.4	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Tetrahydrofuran	ND	200	9.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Toluene	ND	20	4.5	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,2,3-Trichlorobenzene	ND	100	6.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,2,4-Trichlorobenzene	ND	20	6.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,3,5-Trichlorobenzene	ND	20	4.2	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,1,1-Trichloroethane	ND	20	3.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,1,2-Trichloroethane	ND	20	3.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Trichloroethylene	36	20	3.5	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Trichlorofluoromethane (Freon 11)	ND	40	3.1	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,2,3-Trichloropropane	ND	40	5.5	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	20	4.2	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,2,4-Trimethylbenzene	ND	20	4.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
1,3,5-Trimethylbenzene	ND	20	3.0	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Vinyl Chloride	ND	40	4.7	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
m+p Xylene	ND	40	9.8	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
o-Xylene	ND	20	4.9	µg/L	20		SW-846 8260D	6/12/23	6/13/23 6:40	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	96.8		70-130				6/13/23 6:40			
Toluene-d8	99.5		70-130				6/13/23 6:40			
4-Bromofluorobenzene	91.3		70-130				6/13/23 6:40			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-15

Sampled: 6/6/2023 08:48

Sample ID: 23F0975-02

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	6/12/23	6/22/23 13:49	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	28.2		15-110				6/22/23 13:49			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-GEMW-2

Sampled: 6/6/2023 09:53

Sample ID: 23F0975-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Acrylonitrile	ND	5.0	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 5:47	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
cis-1,2-Dichloroethylene	0.27	1.0	0.14	µg/L	1	J	SW-846 8260D	6/12/23	6/13/23 5:47	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-GEMW-2

Sampled: 6/6/2023 09:53

Sample ID: 23F0975-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Tetrachloroethylene	67	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Trichloroethylene	1.1	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 5:47	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	94.9		70-130				6/13/23 5:47			
Toluene-d8	99.2		70-130				6/13/23 5:47			
4-Bromofluorobenzene	89.2		70-130				6/13/23 5:47			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-GEMW-2

Sampled: 6/6/2023 09:53

Sample ID: 23F0975-03

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.033	µg/L	1		SW-846 8270E	6/12/23	6/22/23 14:10	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	31.3		15-110				6/22/23 14:10			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-18

Sampled: 6/6/2023 15:05

Sample ID: 23F0975-04

Sample Matrix: Ground Water

Sample Flags: PR-08

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	4.0	50	2.0	µg/L	1	J	SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Acrylonitrile	ND	5.0	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 2:40	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
cis-1,2-Dichloroethylene	0.58	1.0	0.14	µg/L	1	J	SW-846 8260D	6/12/23	6/13/23 2:40	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-18

Sampled: 6/6/2023 15:05

Sample ID: 23F0975-04

Sample Matrix: Ground Water

Sample Flags: PR-08

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Tetrachloroethylene	1.7	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Trichloroethylene	0.90	1.0	0.17	µg/L	1	J	SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 2:40	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	96.6		70-130				6/13/23 2:40			
Toluene-d8	98.6		70-130				6/13/23 2:40			
4-Bromofluorobenzene	91.7		70-130				6/13/23 2:40			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-18

Sampled: 6/6/2023 15:05

Sample ID: 23F0975-04

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.033	µg/L	1		SW-846 8270E	6/12/23	6/22/23 14:31	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	32.3		15-110				6/22/23 14:31			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-20

Sampled: 6/6/2023 11:01

Sample ID: 23F0975-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	2.7	50	2.0	µg/L	1	J	SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Acrylonitrile	ND	5.0	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 3:07	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-20

Sampled: 6/6/2023 11:01

Sample ID: 23F0975-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:07	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual						
1,2-Dichloroethane-d4	97.8	70-130								
Toluene-d8	101	70-130								
4-Bromofluorobenzene	90.3	70-130								

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-20

Sampled: 6/6/2023 11:01

Sample ID: 23F0975-05

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	6/12/23	6/22/23 14:51	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	23.9		15-110				6/22/23 14:51			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-19

Sampled: 6/6/2023 11:31

Sample ID: 23F0975-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Acrylonitrile	ND	5.0	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 3:33	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
cis-1,2-Dichloroethylene	9.4	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-19

Sampled: 6/6/2023 11:31

Sample ID: 23F0975-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Tetrachloroethylene	41	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Trichloroethylene	10	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Vinyl Chloride	0.29	2.0	0.24	µg/L	1	J	SW-846 8260D	6/12/23	6/13/23 3:33	MFF
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 3:33	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.0		70-130				6/13/23 3:33			
Toluene-d8	99.9		70-130				6/13/23 3:33			
4-Bromofluorobenzene	89.8		70-130				6/13/23 3:33			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-19

Sampled: 6/6/2023 11:31

Sample ID: 23F0975-06

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.033	µg/L	1		SW-846 8270E	6/12/23	6/22/23 15:12	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	23.9		15-110				6/22/23 15:12			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-MW-19B

Sampled: 6/6/2023 12:23

Sample ID: 23F0975-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Acrylonitrile	ND	5.0	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 4:00	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Chloroform	0.63	2.0	0.14	µg/L	1	J	SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-MW-19B

Sampled: 6/6/2023 12:23

Sample ID: 23F0975-07

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Tetrachloroethylene	4.3	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:00	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.3		70-130				6/13/23 4:00			
Toluene-d8	99.5		70-130				6/13/23 4:00			
4-Bromofluorobenzene	89.7		70-130				6/13/23 4:00			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-MW-19B

Sampled: 6/6/2023 12:23

Sample ID: 23F0975-07

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.033	µg/L	1		SW-846 8270E	6/12/23	6/22/23 15:32	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	18.7		15-110						6/22/23 15:32	

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-MW-21B

Sampled: 6/6/2023 12:33

Sample ID: 23F0975-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Acrylonitrile	ND	5.0	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 4:27	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
cis-1,2-Dichloroethylene	12	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-MW-21B

Sampled: 6/6/2023 12:33

Sample ID: 23F0975-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Tetrachloroethylene	9.2	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Trichloroethylene	7.7	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Vinyl Chloride	0.71	2.0	0.24	µg/L	1	J	SW-846 8260D	6/12/23	6/13/23 4:27	MFF
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:27	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	96.2		70-130				6/13/23 4:27			
Toluene-d8	101		70-130				6/13/23 4:27			
4-Bromofluorobenzene	90.2		70-130				6/13/23 4:27			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-MW-21B

Sampled: 6/6/2023 12:33

Sample ID: 23F0975-08

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	6/12/23	6/22/23 15:53	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	23.2		15-110				6/22/23 15:53			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-21

Sampled: 6/6/2023 15:26

Sample ID: 23F0975-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Acrylonitrile	ND	5.0	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 4:54	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Chloroform	2.7	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-21

Sampled: 6/6/2023 15:26

Sample ID: 23F0975-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Tetrachloroethylene	1.6	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/13/23 4:54	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	99.2		70-130				6/13/23 4:54			
Toluene-d8	100		70-130				6/13/23 4:54			
4-Bromofluorobenzene	90.0		70-130				6/13/23 4:54			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-DP-21

Sampled: 6/6/2023 15:26

Sample ID: 23F0975-09

Sample Matrix: Ground Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.21	0.034	µg/L	1		SW-846 8270E	6/12/23	6/22/23 16:14	AYH
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,4-Dioxane-d8	28.5		15-110				6/22/23 16:14			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-TB-02

Sampled: 6/6/2023 17:05

Sample ID: 23F0975-10

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	8.9	50	2.0	µg/L	1	J	SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Acrylonitrile	ND	5.0	0.47	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.13	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.3	µg/L	1	V-05	SW-846 8260D	6/12/23	6/12/23 22:40	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
sec-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
tert-Butylbenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
2-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
4-Chlorotoluene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Dibromomethane	ND	1.0	0.32	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.5	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,3-Dichloropropane	ND	0.50	0.12	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
2,2-Dichloropropane	ND	1.0	0.35	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Diethyl Ether	ND	2.0	0.14	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0975

Date Received: 6/8/2023

Field Sample #: 828149-TB-02

Sampled: 6/6/2023 17:05

Sample ID: 23F0975-10

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.20	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Hexachlorobutadiene	ND	0.60	0.47	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.13	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1	V-05	SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Naphthalene	ND	2.0	0.38	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
n-Propylbenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.16	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
m+p Xylene	ND	2.0	0.49	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
o-Xylene	ND	1.0	0.24	µg/L	1		SW-846 8260D	6/12/23	6/12/23 22:40	MFF
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
1,2-Dichloroethane-d4	97.3		70-130				6/12/23 22:40			
Toluene-d8	101		70-130				6/12/23 22:40			
4-Bromofluorobenzene	90.9		70-130				6/12/23 22:40			

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Sample Extraction Data**Prep Method:SW-846 5030B Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0975-01 [828149-MW-3]	B342923	0.125	5.00	06/12/23
23F0975-02 [828149-DP-15]	B342923	0.25	5.00	06/12/23
23F0975-03 [828149-GEMW-2]	B342923	5	5.00	06/12/23
23F0975-04 [828149-DP-18]	B342923	5	5.00	06/12/23
23F0975-05 [828149-DP-20]	B342923	5	5.00	06/12/23
23F0975-06 [828149-DP-19]	B342923	5	5.00	06/12/23
23F0975-07 [828149-MW-19B]	B342923	5	5.00	06/12/23
23F0975-08 [828149-MW-21B]	B342923	5	5.00	06/12/23
23F0975-09 [828149-DP-21]	B342923	5	5.00	06/12/23
23F0975-10 [828149-TB-02]	B342923	5	5.00	06/12/23

Prep Method:SW-846 3510C Analytical Method:SW-846 8270E

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0975-01 [828149-MW-3]	B342978	980	1.00	06/12/23
23F0975-02 [828149-DP-15]	B342978	970	1.00	06/12/23
23F0975-03 [828149-GEMW-2]	B342978	975	1.00	06/12/23
23F0975-04 [828149-DP-18]	B342978	975	1.00	06/12/23
23F0975-05 [828149-DP-20]	B342978	970	1.00	06/12/23
23F0975-06 [828149-DP-19]	B342978	975	1.00	06/12/23
23F0975-07 [828149-MW-19B]	B342978	990	1.00	06/12/23
23F0975-08 [828149-MW-21B]	B342978	955	1.00	06/12/23
23F0975-09 [828149-DP-21]	B342978	965	1.00	06/12/23

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342923 - SW-846 5030B
Blank (B342923-BLK1)

Prepared & Analyzed: 06/12/23

Acetone	ND	50	µg/L							
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							V-05
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							

V-05

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342923 - SW-846 5030B
Blank (B342923-BLK1)

Prepared & Analyzed: 06/12/23

Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,3,5-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.5		µg/L	25.0		94.2	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	22.9		µg/L	25.0		91.7	70-130			

LCS (B342923-BS1)

Prepared & Analyzed: 06/12/23

Acetone	93.3	50	µg/L	100		93.3	70-160			†
Acrylonitrile	10.1	5.0	µg/L	10.0		101	70-130			
tert-Amyl Methyl Ether (TAME)	8.91	0.50	µg/L	10.0		89.1	70-130			
Benzene	10.4	1.0	µg/L	10.0		104	70-130			
Bromobenzene	9.96	1.0	µg/L	10.0		99.6	70-130			
Bromochloromethane	10.5	1.0	µg/L	10.0		105	70-130			
Bromodichloromethane	9.74	0.50	µg/L	10.0		97.4	70-130			
Bromoform	8.38	1.0	µg/L	10.0		83.8	70-130			
Bromomethane	11.8	2.0	µg/L	10.0		118	40-160	V-20		†
2-Butanone (MEK)	106	20	µg/L	100		106	40-160			†
tert-Butyl Alcohol (TBA)	75.0	20	µg/L	100		75.0	40-160	V-05		†
n-Butylbenzene	9.74	1.0	µg/L	10.0		97.4	70-130			
sec-Butylbenzene	9.39	1.0	µg/L	10.0		93.9	70-130			
tert-Butylbenzene	9.27	1.0	µg/L	10.0		92.7	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.15	0.50	µg/L	10.0		91.5	70-130			
Carbon Disulfide	85.9	5.0	µg/L	100		85.9	70-130			
Carbon Tetrachloride	9.29	5.0	µg/L	10.0		92.9	70-130			
Chlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
Chlorodibromomethane	9.37	0.50	µg/L	10.0		93.7	70-130			
Chloroethane	9.07	2.0	µg/L	10.0		90.7	70-130			
Chloroform	9.73	2.0	µg/L	10.0		97.3	70-130			

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342923 - SW-846 5030B										
LCS (B342923-BS1)				Prepared & Analyzed: 06/12/23						
Chloromethane	9.08	2.0	µg/L	10.0		90.8	40-160			†
2-Chlorotoluene	10.1	1.0	µg/L	10.0		101	70-130			
4-Chlorotoluene	10.2	1.0	µg/L	10.0		102	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.08	5.0	µg/L	10.0		80.8	70-130			
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0		101	70-130			
Dibromomethane	9.84	1.0	µg/L	10.0		98.4	70-130			
1,2-Dichlorobenzene	9.85	1.0	µg/L	10.0		98.5	70-130			
1,3-Dichlorobenzene	10.0	1.0	µg/L	10.0		100	70-130			
1,4-Dichlorobenzene	9.95	1.0	µg/L	10.0		99.5	70-130			
trans-1,4-Dichloro-2-butene	8.65	2.0	µg/L	10.0		86.5	70-130			
Dichlorodifluoromethane (Freon 12)	9.74	2.0	µg/L	10.0		97.4	40-160			†
1,1-Dichloroethane	9.75	1.0	µg/L	10.0		97.5	70-130			
1,2-Dichloroethane	9.35	1.0	µg/L	10.0		93.5	70-130			
1,1-Dichloroethylene	8.74	1.0	µg/L	10.0		87.4	70-130			
cis-1,2-Dichloroethylene	9.40	1.0	µg/L	10.0		94.0	70-130			
trans-1,2-Dichloroethylene	8.69	1.0	µg/L	10.0		86.9	70-130			
1,2-Dichloropropane	10.3	1.0	µg/L	10.0		103	70-130			
1,3-Dichloropropane	10.4	0.50	µg/L	10.0		104	70-130			
2,2-Dichloropropane	7.85	1.0	µg/L	10.0		78.5	40-130			†
1,1-Dichloropropene	9.36	2.0	µg/L	10.0		93.6	70-130			
cis-1,3-Dichloropropene	9.46	0.50	µg/L	10.0		94.6	70-130			
trans-1,3-Dichloropropene	9.19	0.50	µg/L	10.0		91.9	70-130			
Diethyl Ether	9.65	2.0	µg/L	10.0		96.5	70-130			
Diisopropyl Ether (DIPE)	10.1	0.50	µg/L	10.0		101	70-130			
1,4-Dioxane	90.4	50	µg/L	100		90.4	40-130			†
Ethylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
Hexachlorobutadiene	10.7	0.60	µg/L	10.0		107	70-130			
2-Hexanone (MBK)	97.2	10	µg/L	100		97.2	70-160			†
Isopropylbenzene (Cumene)	9.63	1.0	µg/L	10.0		96.3	70-130			
p-Isopropyltoluene (p-Cymene)	9.56	1.0	µg/L	10.0		95.6	70-130			
Methyl Acetate	7.65	1.0	µg/L	10.0		76.5	70-130			V-05
Methyl tert-Butyl Ether (MTBE)	8.95	1.0	µg/L	10.0		89.5	70-130			
Methyl Cyclohexane	9.62	1.0	µg/L	10.0		96.2	70-130			
Methylene Chloride	9.08	5.0	µg/L	10.0		90.8	70-130			
4-Methyl-2-pentanone (MIBK)	95.4	10	µg/L	100		95.4	70-160			†
Naphthalene	8.37	2.0	µg/L	10.0		83.7	40-130			†
n-Propylbenzene	10.1	1.0	µg/L	10.0		101	70-130			
Styrene	10.4	1.0	µg/L	10.0		104	70-130			
1,1,1,2-Tetrachloroethane	10.1	1.0	µg/L	10.0		101	70-130			
1,1,2,2-Tetrachloroethane	10.0	0.50	µg/L	10.0		100	70-130			
Tetrachloroethylene	10.0	1.0	µg/L	10.0		100	70-130			
Tetrahydrofuran	9.63	10	µg/L	10.0		96.3	70-130			J
Toluene	10.2	1.0	µg/L	10.0		102	70-130			
1,2,3-Trichlorobenzene	9.55	5.0	µg/L	10.0		95.5	70-130			
1,2,4-Trichlorobenzene	9.60	1.0	µg/L	10.0		96.0	70-130			
1,3,5-Trichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
1,1,1-Trichloroethane	9.38	1.0	µg/L	10.0		93.8	70-130			
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
Trichloroethylene	9.89	1.0	µg/L	10.0		98.9	70-130			
Trichlorofluoromethane (Freon 11)	8.85	2.0	µg/L	10.0		88.5	70-130			
1,2,3-Trichloropropane	10.3	2.0	µg/L	10.0		103	70-130			V-20

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342923 - SW-846 5030B										
LCS (B342923-BS1)										
Prepared & Analyzed: 06/12/23										
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.61	1.0	µg/L	10.0		96.1	70-130			
1,2,4-Trimethylbenzene	9.41	1.0	µg/L	10.0		94.1	70-130			
1,3,5-Trimethylbenzene	9.94	1.0	µg/L	10.0		99.4	70-130			
Vinyl Chloride	10.1	2.0	µg/L	10.0		101	40-160			†
m+p Xylene	20.5	2.0	µg/L	20.0		102	70-130			
o-Xylene	9.73	1.0	µg/L	10.0		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.2		µg/L	25.0		96.9	70-130			
Surrogate: Toluene-d8	25.6		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		98.0	70-130			
LCS Dup (B342923-BSD1)										
Prepared & Analyzed: 06/12/23										
Acetone	86.6	50	µg/L	100		86.6	70-160	7.50	25	†
Acrylonitrile	9.90	5.0	µg/L	10.0		99.0	70-130	2.10	25	
tert-Amyl Methyl Ether (TAME)	9.06	0.50	µg/L	10.0		90.6	70-130	1.67	25	
Benzene	10.8	1.0	µg/L	10.0		108	70-130	4.15	25	
Bromobenzene	10.3	1.0	µg/L	10.0		103	70-130	3.16	25	
Bromochloromethane	10.8	1.0	µg/L	10.0		108	70-130	3.47	25	
Bromodichloromethane	9.59	0.50	µg/L	10.0		95.9	70-130	1.55	25	
Bromoform	7.93	1.0	µg/L	10.0		79.3	70-130	5.52	25	
Bromomethane	11.8	2.0	µg/L	10.0		118	40-160	0.170	25	V-20 †
2-Butanone (MEK)	99.1	20	µg/L	100		99.1	40-160	6.52	25	†
tert-Butyl Alcohol (TBA)	66.6	20	µg/L	100		66.6	40-160	11.8	25	V-05 †
n-Butylbenzene	9.88	1.0	µg/L	10.0		98.8	70-130	1.43	25	
sec-Butylbenzene	9.71	1.0	µg/L	10.0		97.1	70-130	3.35	25	
tert-Butylbenzene	9.49	1.0	µg/L	10.0		94.9	70-130	2.35	25	
tert-Butyl Ethyl Ether (TBEE)	9.36	0.50	µg/L	10.0		93.6	70-130	2.27	25	
Carbon Disulfide	87.1	5.0	µg/L	100		87.1	70-130	1.45	25	
Carbon Tetrachloride	9.33	5.0	µg/L	10.0		93.3	70-130	0.430	25	
Chlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	3.28	25	
Chlorodibromomethane	9.36	0.50	µg/L	10.0		93.6	70-130	0.107	25	
Chloroethane	9.28	2.0	µg/L	10.0		92.8	70-130	2.29	25	
Chloroform	10.0	2.0	µg/L	10.0		100	70-130	2.94	25	
Chloromethane	8.83	2.0	µg/L	10.0		88.3	40-160	2.79	25	†
2-Chlorotoluene	10.6	1.0	µg/L	10.0		106	70-130	4.56	25	
4-Chlorotoluene	10.4	1.0	µg/L	10.0		104	70-130	2.14	25	
1,2-Dibromo-3-chloropropane (DBCP)	7.88	5.0	µg/L	10.0		78.8	70-130	2.51	25	
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0		101	70-130	0.396	25	
Dibromomethane	9.90	1.0	µg/L	10.0		99.0	70-130	0.608	25	
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	3.10	25	
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	3.24	25	
1,4-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	3.26	25	
trans-1,4-Dichloro-2-butene	8.20	2.0	µg/L	10.0		82.0	70-130	5.34	25	
Dichlorodifluoromethane (Freon 12)	9.64	2.0	µg/L	10.0		96.4	40-160	1.03	25	†
1,1-Dichloroethane	9.79	1.0	µg/L	10.0		97.9	70-130	0.409	25	
1,2-Dichloroethane	9.50	1.0	µg/L	10.0		95.0	70-130	1.59	25	
1,1-Dichloroethylene	9.06	1.0	µg/L	10.0		90.6	70-130	3.60	25	
cis-1,2-Dichloroethylene	9.80	1.0	µg/L	10.0		98.0	70-130	4.17	25	
trans-1,2-Dichloroethylene	9.10	1.0	µg/L	10.0		91.0	70-130	4.61	25	
1,2-Dichloropropane	10.7	1.0	µg/L	10.0		107	70-130	3.81	25	
1,3-Dichloropropane	10.2	0.50	µg/L	10.0		102	70-130	2.23	25	
2,2-Dichloropropane	8.08	1.0	µg/L	10.0		80.8	40-130	2.89	25	†
1,1-Dichloropropene	9.95	2.0	µg/L	10.0		99.5	70-130	6.11	25	

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QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B342923 - SW-846 5030B										
LCS Dup (B342923-BSD1)				Prepared & Analyzed: 06/12/23						
cis-1,3-Dichloropropene	9.70	0.50	µg/L	10.0		97.0	70-130	2.51	25	
trans-1,3-Dichloropropene	9.03	0.50	µg/L	10.0		90.3	70-130	1.76	25	
Diethyl Ether	9.67	2.0	µg/L	10.0		96.7	70-130	0.207	25	
Diisopropyl Ether (DIPE)	10.2	0.50	µg/L	10.0		102	70-130	1.18	25	
1,4-Dioxane	84.0	50	µg/L	100		84.0	40-130	7.29	50	† ‡
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130	2.41	25	
Hexachlorobutadiene	10.9	0.60	µg/L	10.0		109	70-130	2.41	25	
2-Hexanone (MBK)	86.5	10	µg/L	100		86.5	70-160	11.7	25	†
Isopropylbenzene (Cumene)	10.0	1.0	µg/L	10.0		100	70-130	3.77	25	
p-Isopropyltoluene (p-Cymene)	9.77	1.0	µg/L	10.0		97.7	70-130	2.17	25	
Methyl Acetate	7.64	1.0	µg/L	10.0		76.4	70-130	0.131	25	V-05
Methyl tert-Butyl Ether (MTBE)	9.03	1.0	µg/L	10.0		90.3	70-130	0.890	25	
Methyl Cyclohexane	9.97	1.0	µg/L	10.0		99.7	70-130	3.57	25	
Methylene Chloride	9.35	5.0	µg/L	10.0		93.5	70-130	2.93	25	
4-Methyl-2-pentanone (MIBK)	87.5	10	µg/L	100		87.5	70-160	8.68	25	†
Naphthalene	8.29	2.0	µg/L	10.0		82.9	40-130	0.960	25	†
n-Propylbenzene	10.3	1.0	µg/L	10.0		103	70-130	1.77	25	
Styrene	10.5	1.0	µg/L	10.0		105	70-130	1.43	25	
1,1,1,2-Tetrachloroethane	10.3	1.0	µg/L	10.0		103	70-130	1.66	25	
1,1,2,2-Tetrachloroethane	9.60	0.50	µg/L	10.0		96.0	70-130	4.58	25	
Tetrachloroethylene	10.3	1.0	µg/L	10.0		103	70-130	2.37	25	
Tetrahydrofuran	9.96	10	µg/L	10.0		99.6	70-130	3.37	25	J
Toluene	10.2	1.0	µg/L	10.0		102	70-130	0.490	25	
1,2,3-Trichlorobenzene	9.97	5.0	µg/L	10.0		99.7	70-130	4.30	25	
1,2,4-Trichlorobenzene	9.85	1.0	µg/L	10.0		98.5	70-130	2.57	25	
1,3,5-Trichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	1.06	25	
1,1,1-Trichloroethane	9.52	1.0	µg/L	10.0		95.2	70-130	1.48	25	
1,1,2-Trichloroethane	10.3	1.0	µg/L	10.0		103	70-130	4.46	25	
Trichloroethylene	10.0	1.0	µg/L	10.0		100	70-130	1.41	25	
Trichlorofluoromethane (Freon 11)	9.02	2.0	µg/L	10.0		90.2	70-130	1.90	25	
1,2,3-Trichloropropane	11.6	2.0	µg/L	10.0		116	70-130	12.1	25	V-20
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.59	1.0	µg/L	10.0		95.9	70-130	0.208	25	
1,2,4-Trimethylbenzene	9.55	1.0	µg/L	10.0		95.5	70-130	1.48	25	
1,3,5-Trimethylbenzene	10.2	1.0	µg/L	10.0		102	70-130	2.78	25	
Vinyl Chloride	10.3	2.0	µg/L	10.0		103	40-160	2.15	25	†
m+p Xylene	20.7	2.0	µg/L	20.0		103	70-130	0.923	25	
o-Xylene	10.1	1.0	µg/L	10.0		101	70-130	3.34	25	
Surrogate: 1,2-Dichloroethane-d4	23.1		µg/L	25.0		92.3	70-130			
Surrogate: Toluene-d8	25.2		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	24.6		µg/L	25.0		98.3	70-130			

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QUALITY CONTROL
1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342978 - SW-846 3510C
Blank (B342978-BLK1)

Prepared: 06/12/23 Analyzed: 06/21/23

1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	2.84		µg/L	10.0		28.4	15-110			

LCS (B342978-BS1)

Prepared: 06/12/23 Analyzed: 06/21/23

1,4-Dioxane	9.95	0.20	µg/L	10.0		99.5	40-140			
Surrogate: 1,4-Dioxane-d8	3.21		µg/L	10.0		32.1	15-110			

LCS Dup (B342978-BSD1)

Prepared: 06/12/23 Analyzed: 06/21/23

1,4-Dioxane	10.6	0.20	µg/L	10.0		106	40-140	6.00	30	
Surrogate: 1,4-Dioxane-d8	3.12		µg/L	10.0		31.2	15-110			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
PR-08	pH of sample (pH 5) is outside of method specified preservation criteria.
RL-11	Elevated reporting limit due to high concentration of target compounds.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	ME,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
Dibromomethane	ME,NH,VA,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	ME,NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY

SW-846 8270E in Water

1,4-Dioxane NY,NH

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2023

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ENV-FRM-ELON-0001 V05__Sample Receiving Checklist

Log In Back-Sheet

Login Sample Receipt Checklist - (Rejection Criteria Listing
- Using Acceptance Policy) Any False statement will be
brought to the attention of the Client - True or False



Client EA Engineering
Project Town & Country Dry cleaners

MCP/RCP Required N/A

Deliverable Package Requirement CAT B

Location Brighton, NY

PWSID# (When Applicable) N/A

Arrival Method:

Courier ☐ Fed Ex ☒ Walk In ☐ Other ☐

Received By / Date / Time AAH/6-23/0951

Back-Sheet By / Date / Time AAH/6-23/1030

Temperature/Method Temp. Gun # 4

Temp ☒ 6° C Actual Temperature 2.2/3.0

Rush Samples: Yes / No Notify

Short Hold: Yes / No Notify

Notes regarding Samples/COC outside of SOP:

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☐	☒
Trip Blanks	☒	☐
Lab to Filters	☐	☒
COC Legible	☒	☐

COC Included: (Check all included)

Client ☒ Analysis ☒ Sampler Name ☒
Project ☒ IDs ☒ Collection Date/Time ☒

All Samples Proper pH:

N/A

☐

☐

Additional Container Notes

Sample	Soils Jars				Ambers				Plastics								VOA Vials					Other / Fill in							
	(Circle Amb/Clear)																												
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	1 Liter	250mL	100mL	1 Liter	500mL	250mL																			
1					2	Unpreserved																							
2						HCL																							
3						Sulfuric																							
4						Sulfuric																							
5						Phosphoric																							
6						HCl																							
7						Unpreserved																							
8						Unpreserved																							
9						Sulfuric																							
10						Unpreserved																							
11						Trizma																							
12						Sulfuric																							
13						Nitric																							
14						NaOH																							
15						NaOH/Zinc																							
16						Unpreserved																							
17						HCl																							
18						MeOH																							
19						D.I. Water																							
20						BiSulfate																							
						Col/Bact																							

June 28, 2023

Moriah Gilkey
NYDEC_EA Engineering, Science & Tech. - NY
269 West Jefferson St.
Syracuse, NY 13202

Project Location: Brighton, NY
Client Job Number:
Project Number: 828149
Laboratory Work Order Number: 23F0982

Enclosed are results of analyses for samples as received by the laboratory on June 8, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle K. Stuckey
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332NYDEC_EA Engineering, Science & Tech. - NY
269 West Jefferson St.
Syracuse, NY 13202
ATTN: Moriah Gilkey

REPORT DATE: 6/28/2023

PURCHASE ORDER NUMBER: 147421

PROJECT NUMBER: 828149

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F0982

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Brighton, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
828149-MW-3	23F0982-01	Ground Water		Draft Method 1633	
828149-DP-15	23F0982-02	Ground Water		Draft Method 1633	
828149-GEMW-2	23F0982-03	Ground Water		Draft Method 1633	
828149-DP-18	23F0982-04	Ground Water		Draft Method 1633	
828149-DP-20	23F0982-05	Ground Water		Draft Method 1633	
828149-DP-19	23F0982-06	Ground Water		Draft Method 1633	
828149-MW-19B	23F0982-07	Ground Water		Draft Method 1633	
828149-MW-21B	23F0982-08	Ground Water		Draft Method 1633	
828149-DP-21	23F0982-09	Ground Water		Draft Method 1633	
828149-FB-02	23F0982-10	Field Blank		Draft Method 1633	
828149-EB-01	23F0982-11	Equipment Blank Water		Draft Method 1633	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-MW-3

Sampled: 6/6/2023 09:06

Sample ID: 23F0982-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	8.9	4.1	1.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluoropentanoic acid (PFPeA)	2.5	2.1	0.36	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorohexanoic acid (PFHxA)	2.8	1.0	0.22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluoroheptanoic acid (PFHpA)	1.8	1.0	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorooctanoic acid (PFOA)	3.7	1.0	0.23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorononanoic acid (PFNA)	0.25	1.0	0.20	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorobutanesulfonic acid (PFBS)	2.4	1.0	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.62	1.0	0.21	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorooctanesulfonic acid (PFOS)	1.4	1.0	0.33	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.1	0.72	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.1	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	0.43	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.45	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.1	0.71	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.1	0.88	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
11Cl-PF3OUdS (F53B Major)	ND	4.1	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	52	11	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	52	9.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.1	0.51	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.1	0.51	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-MW-3

Sampled: 6/6/2023 09:06

Sample ID: 23F0982-01

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.1	0.42	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.1	0.89	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:27	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	39.6		10-130				6/27/23 18:27			
13C5-PFPeA	72.2		35-150				6/27/23 18:27			
13C5-PFHxA	73.2		55-150				6/27/23 18:27			
13C4-PFHpA	70.5		55-150				6/27/23 18:27			
13C8-PFOA	70.0		60-140				6/27/23 18:27			
13C9-PFNA	72.6		55-140				6/27/23 18:27			
13C6-PFDA	70.0		50-140				6/27/23 18:27			
13C7-PFUnA	69.6		30-140				6/27/23 18:27			
13C2-PFDoA	64.8		10-150				6/27/23 18:27			
13C2-PFTeDA	65.9		10-130				6/27/23 18:27			
13C3-PFBS	73.4		55-150				6/27/23 18:27			
13C3-PFHxS	70.9		55-150				6/27/23 18:27			
13C8-PFOS	71.0		45-140				6/27/23 18:27			
13C2-4:2FTS	83.9		60-200				6/27/23 18:27			
13C2-6:2FTS	71.9		60-200				6/27/23 18:27			
13C2-8:2FTS	65.8		50-200				6/27/23 18:27			
13C8-PFOSA	64.5		30-130				6/27/23 18:27			
D3-NMeFOSA	53.9		15-130				6/27/23 18:27			
D5-NEtFOSA	57.8		10-130				6/27/23 18:27			
D3-NMeFOSAA	65.6		45-200				6/27/23 18:27			
D5-NEtFOSAA	67.4		10-200				6/27/23 18:27			
D7-NMeFOSE	68.6		10-150				6/27/23 18:27			
D9-NEtFOSE	73.4		10-150				6/27/23 18:27			
13C3-HFPO-DA	77.3		25-160				6/27/23 18:27			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-MW-3

Sampled: 6/6/2023 09:06

Sample ID: 23F0982-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	50	10	mg/L	1		Draft Method 1633	6/12/23	6/12/23 13:55	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-15

Sampled: 6/6/2023 08:48

Sample ID: 23F0982-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	400	150	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluoropentanoic acid (PFPeA)	ND	200	35	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorohexanoic acid (PFHxA)	ND	100	22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluoroheptanoic acid (PFHpA)	ND	100	25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorooctanoic acid (PFOA)	ND	100	23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorononanoic acid (PFNA)	ND	100	19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorodecanoic acid (PFDA)	ND	100	18	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluoroundecanoic acid (PFUnA)	ND	100	27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorododecanoic acid (PFDoA)	ND	100	26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	100	27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	100	25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	100	26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	100	24	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	100	21	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	100	31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	100	32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorononanesulfonic acid (PFNS)	ND	100	29	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	100	31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	100	27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	400	70	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	400	99	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	400	110	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	100	31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	100	42	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	100	31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
N-MeFOSAA (NMeFOSAA)	ND	100	44	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
N-EtFOSAA (NEtFOSAA)	ND	100	22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	1000	260	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	1000	250	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	400	100	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	400	69	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
9Cl-PF3ONS (F53B Minor)	ND	400	85	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
11Cl-PF3OUs (F53B Major)	ND	400	97	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	1000	180	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	5000	1000	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	5000	880	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	200	49	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	200	50	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-15

Sampled: 6/6/2023 08:48

Sample ID: 23F0982-02

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	200	40	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	200	87	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:42	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	73.7		10-130				6/27/23 18:42			
13C5-PFPeA	73.8		35-150				6/27/23 18:42			
13C5-PFHxA	73.7		55-150				6/27/23 18:42			
13C4-PFHpA	70.2		55-150				6/27/23 18:42			
13C8-PFOA	73.4		60-140				6/27/23 18:42			
13C9-PFNA	73.8		55-140				6/27/23 18:42			
13C6-PFDA	72.0		50-140				6/27/23 18:42			
13C7-PFUnA	69.0		30-140				6/27/23 18:42			
13C2-PFDoA	63.0		10-150				6/27/23 18:42			
13C2-PFTeDA	61.8		10-130				6/27/23 18:42			
13C3-PFBS	74.8		55-150				6/27/23 18:42			
13C3-PFHxS	71.7		55-150				6/27/23 18:42			
13C8-PFOS	71.0		45-140				6/27/23 18:42			
13C2-4:2FTS	66.3		60-200				6/27/23 18:42			
13C2-6:2FTS	65.3		60-200				6/27/23 18:42			
13C2-8:2FTS	60.5		50-200				6/27/23 18:42			
13C8-PFOSA	66.7		30-130				6/27/23 18:42			
D3-NMeFOSA	56.1		15-130				6/27/23 18:42			
D5-NEtFOSA	57.7		10-130				6/27/23 18:42			
D3-NMeFOSAA	65.4		45-200				6/27/23 18:42			
D5-NEtFOSAA	68.1		10-200				6/27/23 18:42			
D7-NMeFOSE	61.2		10-150				6/27/23 18:42			
D9-NEtFOSE	60.0		10-150				6/27/23 18:42			
13C3-HFPO-DA	77.3		25-160				6/27/23 18:42			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-15

Sampled: 6/6/2023 08:48

Sample ID: 23F0982-02

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	12000	20	mg/L	1		Draft Method 1633	6/12/23	6/12/23 13:55	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-GEMW-2

Sampled: 6/6/2023 09:53

Sample ID: 23F0982-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	40	15	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluoropentanoic acid (PFPeA)	ND	20	3.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorohexanoic acid (PFHxA)	ND	10	2.2	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluoroheptanoic acid (PFHpA)	ND	10	2.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorooctanoic acid (PFOA)	ND	10	2.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorononanoic acid (PFNA)	ND	10	1.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorodecanoic acid (PFDA)	ND	10	1.8	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluoroundecanoic acid (PFUnA)	ND	10	2.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorododecanoic acid (PFDoA)	ND	10	2.6	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	10	2.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	10	2.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	10	2.6	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	10	2.4	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	10	2.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	10	3.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	10	3.2	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorononanesulfonic acid (PFNS)	ND	10	2.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	10	3.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	10	2.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	40	7.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	40	9.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	40	11	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	10	3.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	10	4.2	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	10	3.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
N-MeFOSAA (NMeFOSAA)	ND	10	4.4	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
N-EtFOSAA (NEtFOSAA)	ND	10	2.2	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	100	26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	100	25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	40	10	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	40	6.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
9Cl-PF3ONS (F53B Minor)	ND	40	8.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
11Cl-PF3OUDs (F53B Major)	ND	40	9.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	100	18	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	500	100	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	500	88	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	20	4.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	20	5.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-GEMW-2

Sampled: 6/6/2023 09:53

Sample ID: 23F0982-03

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	20	4.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	20	8.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 18:58	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	68.6		10-130				6/27/23 18:58			
13C5-PFPeA	75.6		35-150				6/27/23 18:58			
13C5-PFHxA	73.2		55-150				6/27/23 18:58			
13C4-PFHpA	71.6		55-150				6/27/23 18:58			
13C8-PFOA	69.3		60-140				6/27/23 18:58			
13C9-PFNA	74.0		55-140				6/27/23 18:58			
13C6-PFDA	69.1		50-140				6/27/23 18:58			
13C7-PFUnA	67.0		30-140				6/27/23 18:58			
13C2-PFDoA	62.2		10-150				6/27/23 18:58			
13C2-PFTeDA	62.5		10-130				6/27/23 18:58			
13C3-PFBS	71.1		55-150				6/27/23 18:58			
13C3-PFHxS	71.3		55-150				6/27/23 18:58			
13C8-PFOS	70.2		45-140				6/27/23 18:58			
13C2-4:2FTS	63.2		60-200				6/27/23 18:58			
13C2-6:2FTS	65.1		60-200				6/27/23 18:58			
13C2-8:2FTS	62.4		50-200				6/27/23 18:58			
13C8-PFOSA	66.7		30-130				6/27/23 18:58			
D3-NMeFOSA	54.9		15-130				6/27/23 18:58			
D5-NEtFOSA	57.2		10-130				6/27/23 18:58			
D3-NMeFOSAA	65.8		45-200				6/27/23 18:58			
D5-NEtFOSAA	67.6		10-200				6/27/23 18:58			
D7-NMeFOSE	60.0		10-150				6/27/23 18:58			
D9-NEtFOSE	58.5		10-150				6/27/23 18:58			
13C3-HFPO-DA	79.9		25-160				6/27/23 18:58			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-GEMW-2

Sampled: 6/6/2023 09:53

Sample ID: 23F0982-03

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	710	10	mg/L	1		Draft Method 1633	6/12/23	6/12/23 13:55	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-18

Sampled: 6/6/2023 15:05

Sample ID: 23F0982-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	400	150	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluoropentanoic acid (PFPeA)	ND	200	35	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorohexanoic acid (PFHxA)	ND	100	22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluoroheptanoic acid (PFHpA)	ND	100	25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorooctanoic acid (PFOA)	ND	100	23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorononanoic acid (PFNA)	ND	100	19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorodecanoic acid (PFDA)	ND	100	18	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluoroundecanoic acid (PFUnA)	ND	100	27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorododecanoic acid (PFDoA)	ND	100	26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	100	27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	100	25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	100	26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	100	24	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	100	21	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	100	31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	100	32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorononanesulfonic acid (PFNS)	ND	100	29	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	100	31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	100	27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	400	70	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	520	400	99	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	400	110	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	100	31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	100	42	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	100	31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
N-MeFOSAA (NMeFOSAA)	ND	100	44	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
N-EtFOSAA (NEtFOSAA)	ND	100	22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	1000	260	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	1000	250	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	400	100	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	400	69	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
9Cl-PF3ONS (F53B Minor)	ND	400	85	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
11Cl-PF3OUDs (F53B Major)	ND	400	97	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	1000	180	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	5000	1000	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	5000	880	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	200	49	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	200	50	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-18

Sampled: 6/6/2023 15:05

Sample ID: 23F0982-04

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	200	40	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	200	87	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:14	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	71.5		10-130				6/27/23 19:14			
13C5-PFPeA	73.9		35-150				6/27/23 19:14			
13C5-PFHxA	71.6		55-150				6/27/23 19:14			
13C4-PFHpA	70.3		55-150				6/27/23 19:14			
13C8-PFOA	69.6		60-140				6/27/23 19:14			
13C9-PFNA	70.6		55-140				6/27/23 19:14			
13C6-PFDA	70.6		50-140				6/27/23 19:14			
13C7-PFUnA	70.7		30-140				6/27/23 19:14			
13C2-PFDoA	66.9		10-150				6/27/23 19:14			
13C2-PFTeDA	66.2		10-130				6/27/23 19:14			
13C3-PFBS	71.8		55-150				6/27/23 19:14			
13C3-PFHxS	69.3		55-150				6/27/23 19:14			
13C8-PFOS	68.0		45-140				6/27/23 19:14			
13C2-4:2FTS	61.5		60-200				6/27/23 19:14			
13C2-6:2FTS	65.9		60-200				6/27/23 19:14			
13C2-8:2FTS	64.3		50-200				6/27/23 19:14			
13C8-PFOSA	65.0		30-130				6/27/23 19:14			
D3-NMeFOSA	56.2		15-130				6/27/23 19:14			
D5-NEtFOSA	58.2		10-130				6/27/23 19:14			
D3-NMeFOSAA	67.1		45-200				6/27/23 19:14			
D5-NEtFOSAA	68.3		10-200				6/27/23 19:14			
D7-NMeFOSE	61.0		10-150				6/27/23 19:14			
D9-NEtFOSE	58.6		10-150				6/27/23 19:14			
13C3-HFPO-DA	77.0		25-160				6/27/23 19:14			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-18

Sampled: 6/6/2023 15:05

Sample ID: 23F0982-04

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	22000	25	mg/L	1		Draft Method 1633	6/12/23	6/12/23 13:55	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-20

Sampled: 6/6/2023 11:01

Sample ID: 23F0982-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	7.4	4.0	1.4	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluoropentanoic acid (PFPeA)	1.5	2.0	0.34	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorohexanoic acid (PFHxA)	1.7	0.99	0.21	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluoroheptanoic acid (PFHpA)	0.45	0.99	0.25	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorooctanoic acid (PFOA)	1.1	0.99	0.22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorononanoic acid (PFNA)	ND	0.99	0.19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorodecanoic acid (PFDA)	ND	0.99	0.18	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.99	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.99	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	0.25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorobutanesulfonic acid (PFBS)	4.6	0.99	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	0.24	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.60	0.99	0.20	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	0.30	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorooctanesulfonic acid (PFOS)	3.6	0.99	0.31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.99	0.29	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	0.31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.69	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.1	4.0	0.98	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 19:29	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.99	0.30	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.99	0.41	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	0.30	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.99	0.44	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.99	0.22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.9	2.6	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	2.4	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.68	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.84	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
11Cl-PF3OUDs (F53B Major)	ND	4.0	0.96	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	1.8	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	49	10	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	8.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.48	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-20

Sampled: 6/6/2023 11:01

Sample ID: 23F0982-05

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.40	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.86	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:29	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	43.2		10-130				6/27/23 19:29			
13C5-PFPeA	94.0		35-150				6/27/23 19:29			
13C5-PFHxA	92.7		55-150				6/27/23 19:29			
13C4-PFHpA	89.9		55-150				6/27/23 19:29			
13C8-PFOA	89.1		60-140				6/27/23 19:29			
13C9-PFNA	88.8		55-140				6/27/23 19:29			
13C6-PFDA	85.7		50-140				6/27/23 19:29			
13C7-PFUnA	82.6		30-140				6/27/23 19:29			
13C2-PFDoA	76.4		10-150				6/27/23 19:29			
13C2-PFTeDA	76.4		10-130				6/27/23 19:29			
13C3-PFBS	91.7		55-150				6/27/23 19:29			
13C3-PFHxS	89.3		55-150				6/27/23 19:29			
13C8-PFOS	82.1		45-140				6/27/23 19:29			
13C2-4:2FTS	92.6		60-200				6/27/23 19:29			
13C2-6:2FTS	85.3		60-200				6/27/23 19:29			
13C2-8:2FTS	77.8		50-200				6/27/23 19:29			
13C8-PFOSA	79.6		30-130				6/27/23 19:29			
D3-NMeFOSA	66.8		15-130				6/27/23 19:29			
D5-NEtFOSA	70.3		10-130				6/27/23 19:29			
D3-NMeFOSAA	75.9		45-200				6/27/23 19:29			
D5-NEtFOSAA	79.7		10-200				6/27/23 19:29			
D7-NMeFOSE	73.8		10-150				6/27/23 19:29			
D9-NEtFOSE	73.2		10-150				6/27/23 19:29			
13C3-HFPO-DA	98.7		25-160				6/27/23 19:29			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-20

Sampled: 6/6/2023 11:01

Sample ID: 23F0982-05

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	26	10	mg/L	1		Draft Method 1633	6/12/23	6/12/23 13:55	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-19

Sampled: 6/6/2023 11:31

Sample ID: 23F0982-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	8.0	20	7.3	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluoropentanoic acid (PFPeA)	ND	10	1.8	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorohexanoic acid (PFHxA)	1.2	5.0	1.1	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluoroheptanoic acid (PFHpA)	ND	5.0	1.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorooctanoic acid (PFOA)	1.3	5.0	1.1	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorononanoic acid (PFNA)	ND	5.0	0.96	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorodecanoic acid (PFDA)	ND	5.0	0.93	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluoroundecanoic acid (PFUnA)	ND	5.0	1.4	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorododecanoic acid (PFDoA)	ND	5.0	1.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	5.0	1.4	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	5.0	1.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorobutanesulfonic acid (PFBS)	2.2	5.0	1.3	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	5.0	1.2	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	5.0	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	5.0	1.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	5.0	1.6	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorononanesulfonic acid (PFNS)	ND	5.0	1.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	5.0	1.6	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	5.0	1.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	20	3.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	20	5.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	20	5.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	5.0	1.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	5.0	2.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	5.0	1.6	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
N-MeFOSAA (NMeFOSAA)	ND	5.0	2.2	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
N-EtFOSAA (NEtFOSAA)	ND	5.0	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	50	13	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	50	12	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	20	5.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	20	3.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
9Cl-PF3ONS (F53B Minor)	ND	20	4.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
11Cl-PF3OUs (F53B Major)	ND	20	4.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	50	9.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	250	51	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	250	44	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	10	2.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	10	2.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-19

Sampled: 6/6/2023 11:31

Sample ID: 23F0982-06

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	10	2.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	10	4.4	ng/L	1		Draft Method 1633	6/20/23	6/27/23 19:45	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	79.1		10-130				6/27/23 19:45			
13C5-PFPeA	84.8		35-150				6/27/23 19:45			
13C5-PFHxA	82.9		55-150				6/27/23 19:45			
13C4-PFHpA	83.1		55-150				6/27/23 19:45			
13C8-PFOA	84.8		60-140				6/27/23 19:45			
13C9-PFNA	86.2		55-140				6/27/23 19:45			
13C6-PFDA	80.3		50-140				6/27/23 19:45			
13C7-PFUnA	79.5		30-140				6/27/23 19:45			
13C2-PFDoA	78.2		10-150				6/27/23 19:45			
13C2-PFTeDA	78.2		10-130				6/27/23 19:45			
13C3-PFBS	82.8		55-150				6/27/23 19:45			
13C3-PFHxS	82.7		55-150				6/27/23 19:45			
13C8-PFOS	78.8		45-140				6/27/23 19:45			
13C2-4:2FTS	69.4		60-200				6/27/23 19:45			
13C2-6:2FTS	74.2		60-200				6/27/23 19:45			
13C2-8:2FTS	72.7		50-200				6/27/23 19:45			
13C8-PFOSA	77.1		30-130				6/27/23 19:45			
D3-NMeFOSA	66.8		15-130				6/27/23 19:45			
D5-NEtFOSA	69.9		10-130				6/27/23 19:45			
D3-NMeFOSAA	76.4		45-200				6/27/23 19:45			
D5-NEtFOSAA	80.8		10-200				6/27/23 19:45			
D7-NMeFOSE	74.2		10-150				6/27/23 19:45			
D9-NEtFOSE	73.7		10-150				6/27/23 19:45			
13C3-HFPO-DA	86.6		25-160				6/27/23 19:45			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-19

Sampled: 6/6/2023 11:31

Sample ID: 23F0982-06

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	230	10	mg/L	1		Draft Method 1633	6/12/23	6/12/23 13:55	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-MW-19B

Sampled: 6/6/2023 12:23

Sample ID: 23F0982-07

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.4	4.0	1.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluoropentanoic acid (PFPeA)	1.3	2.0	0.35	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorohexanoic acid (PFHxA)	0.84	1.0	0.22	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluoroheptanoic acid (PFHpA)	0.27	1.0	0.26	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorooctanoic acid (PFOA)	0.37	1.0	0.23	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorobutanesulfonic acid (PFBS)	1.4	1.0	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.24	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.23	1.0	0.21	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	0.70	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.0	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	0.42	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.45	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	4.0	0.69	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.0	0.86	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
11Cl-PF3OUDs (F53B Major)	ND	4.0	0.98	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.8	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	51	10	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	8.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.50	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.50	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-MW-19B

Sampled: 6/6/2023 12:23

Sample ID: 23F0982-07

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.41	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.88	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:01	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	51.8		10-130				6/27/23 20:01			
13C5-PFPeA	79.4		35-150				6/27/23 20:01			
13C5-PFHxA	78.3		55-150				6/27/23 20:01			
13C4-PFHpA	77.6		55-150				6/27/23 20:01			
13C8-PFOA	77.1		60-140				6/27/23 20:01			
13C9-PFNA	79.4		55-140				6/27/23 20:01			
13C6-PFDA	79.9		50-140				6/27/23 20:01			
13C7-PFUnA	74.9		30-140				6/27/23 20:01			
13C2-PFDoA	73.5		10-150				6/27/23 20:01			
13C2-PFTeDA	72.3		10-130				6/27/23 20:01			
13C3-PFBS	78.6		55-150				6/27/23 20:01			
13C3-PFHxS	74.3		55-150				6/27/23 20:01			
13C8-PFOS	77.4		45-140				6/27/23 20:01			
13C2-4:2FTS	69.8		60-200				6/27/23 20:01			
13C2-6:2FTS	70.8		60-200				6/27/23 20:01			
13C2-8:2FTS	67.8		50-200				6/27/23 20:01			
13C8-PFOSA	71.7		30-130				6/27/23 20:01			
D3-NMeFOSA	60.4		15-130				6/27/23 20:01			
D5-NEtFOSA	58.7		10-130				6/27/23 20:01			
D3-NMeFOSAA	71.7		45-200				6/27/23 20:01			
D5-NEtFOSAA	72.8		10-200				6/27/23 20:01			
D7-NMeFOSE	66.6		10-150				6/27/23 20:01			
D9-NEtFOSE	65.9		10-150				6/27/23 20:01			
13C3-HFPO-DA	79.5		25-160				6/27/23 20:01			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-MW-19B

Sampled: 6/6/2023 12:23

Sample ID: 23F0982-07

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	14	10	mg/L	1		Draft Method 1633	6/12/23	6/12/23 13:55	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-MW-21B

Sampled: 6/6/2023 12:33

Sample ID: 23F0982-08

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	6.5	4.1	1.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluoropentanoic acid (PFPeA)	1.6	2.1	0.36	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorohexanoic acid (PFHxA)	1.7	1.0	0.22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluoroheptanoic acid (PFHpA)	0.89	1.0	0.26	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorooctanoic acid (PFOA)	3.0	1.0	0.23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorobutanesulfonic acid (PFBS)	7.8	1.0	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.0	0.25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorohexanesulfonic acid (PFHxS)	5.6	1.0	0.21	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.0	0.33	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.1	0.72	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.1	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	0.43	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.46	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.1	0.71	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.1	0.88	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
11Cl-PF3OUDs (F53B Major)	ND	4.1	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	52	11	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	52	9.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.1	0.51	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.1	0.52	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-MW-21B

Sampled: 6/6/2023 12:33

Sample ID: 23F0982-08

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.1	0.42	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.1	0.90	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:16	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	40.5		10-130				6/27/23 20:16			
13C5-PFPeA	79.3		35-150				6/27/23 20:16			
13C5-PFHxA	79.4		55-150				6/27/23 20:16			
13C4-PFHpA	77.0		55-150				6/27/23 20:16			
13C8-PFOA	77.6		60-140				6/27/23 20:16			
13C9-PFNA	78.1		55-140				6/27/23 20:16			
13C6-PFDA	80.8		50-140				6/27/23 20:16			
13C7-PFUnA	75.4		30-140				6/27/23 20:16			
13C2-PFDoA	72.4		10-150				6/27/23 20:16			
13C2-PFTeDA	70.4		10-130				6/27/23 20:16			
13C3-PFBS	77.2		55-150				6/27/23 20:16			
13C3-PFHxS	77.1		55-150				6/27/23 20:16			
13C8-PFOS	78.5		45-140				6/27/23 20:16			
13C2-4:2FTS	69.9		60-200				6/27/23 20:16			
13C2-6:2FTS	68.8		60-200				6/27/23 20:16			
13C2-8:2FTS	67.6		50-200				6/27/23 20:16			
13C8-PFOSA	73.2		30-130				6/27/23 20:16			
D3-NMeFOSA	62.9		15-130				6/27/23 20:16			
D5-NEtFOSA	61.3		10-130				6/27/23 20:16			
D3-NMeFOSAA	70.9		45-200				6/27/23 20:16			
D5-NEtFOSAA	75.1		10-200				6/27/23 20:16			
D7-NMeFOSE	66.3		10-150				6/27/23 20:16			
D9-NEtFOSE	64.9		10-150				6/27/23 20:16			
13C3-HFPO-DA	81.3		25-160				6/27/23 20:16			

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-MW-21B

Sampled: 6/6/2023 12:33

Sample ID: 23F0982-08

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	6/12/23	6/12/23 13:55	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-21

Sampled: 6/6/2023 15:26

Sample ID: 23F0982-09

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	10	4.1	1.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluoropentanoic acid (PFPeA)	2.1	2.1	0.36	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorohexanoic acid (PFHxA)	3.2	1.0	0.22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluoroheptanoic acid (PFHpA)	1.3	1.0	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorooctanoic acid (PFOA)	4.0	1.0	0.23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorononanoic acid (PFNA)	ND	1.0	0.20	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorodecanoic acid (PFDA)	ND	1.0	0.19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.0	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.0	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorobutanesulfonic acid (PFBS)	5.9	1.0	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluoropentanesulfonic acid (PFPeS)	0.26	1.0	0.24	ng/L	1	J	Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorohexanesulfonic acid (PFHxS)	5.5	1.0	0.21	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.0	0.31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorooctanesulfonic acid (PFOS)	1.3	1.0	0.33	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.0	0.30	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.0	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.1	0.72	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.1	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.0	0.43	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.0	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.0	0.45	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.0	0.23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	10	2.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	10	2.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.1	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	4.1	0.71	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.1	0.87	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
11Cl-PF3OUDS (F53B Major)	ND	4.1	0.99	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	10	1.8	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	ND	51	10	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	51	9.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.1	0.50	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.1	0.51	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-21

Sampled: 6/6/2023 15:26

Sample ID: 23F0982-09

Sample Matrix: Ground Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.1	0.41	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.1	0.89	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:32	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	49.7		10-130				6/27/23 20:32			
13C5-PFPeA	78.7		35-150				6/27/23 20:32			
13C5-PFHxA	78.8		55-150				6/27/23 20:32			
13C4-PFHpA	77.8		55-150				6/27/23 20:32			
13C8-PFOA	78.7		60-140				6/27/23 20:32			
13C9-PFNA	78.1		55-140				6/27/23 20:32			
13C6-PFDA	77.2		50-140				6/27/23 20:32			
13C7-PFUnA	71.3		30-140				6/27/23 20:32			
13C2-PFDoA	71.0		10-150				6/27/23 20:32			
13C2-PFTeDA	67.7		10-130				6/27/23 20:32			
13C3-PFBS	77.2		55-150				6/27/23 20:32			
13C3-PFHxS	76.9		55-150				6/27/23 20:32			
13C8-PFOS	74.0		45-140				6/27/23 20:32			
13C2-4:2FTS	69.2		60-200				6/27/23 20:32			
13C2-6:2FTS	68.7		60-200				6/27/23 20:32			
13C2-8:2FTS	65.5		50-200				6/27/23 20:32			
13C8-PFOSA	68.2		30-130				6/27/23 20:32			
D3-NMeFOSA	56.0		15-130				6/27/23 20:32			
D5-NEtFOSA	58.5		10-130				6/27/23 20:32			
D3-NMeFOSAA	67.8		45-200				6/27/23 20:32			
D5-NEtFOSAA	68.0		10-200				6/27/23 20:32			
D7-NMeFOSE	62.2		10-150				6/27/23 20:32			
D9-NEtFOSE	62.4		10-150				6/27/23 20:32			
13C3-HFPO-DA	78.2		25-160				6/27/23 20:32			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-DP-21

Sampled: 6/6/2023 15:26

Sample ID: 23F0982-09

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	6/12/23	6/12/23 13:55	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-FB-02

Sampled: 6/6/2023 17:05

Sample ID: 23F0982-10

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	3.8	1.4	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.33	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.94	0.20	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.94	0.24	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorooctanoic acid (PFOA)	ND	0.94	0.21	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorononanoic acid (PFNA)	ND	0.94	0.18	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorodecanoic acid (PFDA)	ND	0.94	0.17	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.94	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.94	0.24	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.94	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.94	0.24	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.94	0.24	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.94	0.22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.94	0.19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.94	0.29	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.94	0.30	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.94	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.94	0.29	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.94	0.25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	0.66	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	0.93	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.94	0.29	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.94	0.39	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.94	0.29	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.94	0.41	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.94	0.21	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.4	2.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.4	2.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	0.98	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	ND	3.8	0.65	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	0.80	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
11Cl-PF3OUDS (F53B Major)	ND	3.8	0.91	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.4	1.7	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	9.6	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	8.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.46	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-FB-02

Sampled: 6/6/2023 17:05

Sample ID: 23F0982-10

Sample Matrix: Field Blank

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.38	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.82	ng/L	1		Draft Method 1633	6/20/23	6/27/23 20:48	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	77.8		10-130				6/27/23 20:48			
13C5-PFPeA	77.2		35-150				6/27/23 20:48			
13C5-PFHxA	77.4		55-150				6/27/23 20:48			
13C4-PFHpA	75.2		55-150				6/27/23 20:48			
13C8-PFOA	78.5		60-140				6/27/23 20:48			
13C9-PFNA	75.0		55-140				6/27/23 20:48			
13C6-PFDA	76.7		50-140				6/27/23 20:48			
13C7-PFUnA	71.3		30-140				6/27/23 20:48			
13C2-PFDoA	71.1		10-150				6/27/23 20:48			
13C2-PFTeDA	69.6		10-130				6/27/23 20:48			
13C3-PFBS	77.0		55-150				6/27/23 20:48			
13C3-PFHxS	76.1		55-150				6/27/23 20:48			
13C8-PFOS	75.5		45-140				6/27/23 20:48			
13C2-4:2FTS	60.7		60-200				6/27/23 20:48			
13C2-6:2FTS	71.4		60-200				6/27/23 20:48			
13C2-8:2FTS	66.8		50-200				6/27/23 20:48			
13C8-PFOSA	67.0		30-130				6/27/23 20:48			
D3-NMeFOSA	58.3		15-130				6/27/23 20:48			
D5-NEtFOSA	58.1		10-130				6/27/23 20:48			
D3-NMeFOSAA	68.6		45-200				6/27/23 20:48			
D5-NEtFOSAA	69.8		10-200				6/27/23 20:48			
D7-NMeFOSE	64.1		10-150				6/27/23 20:48			
D9-NEtFOSE	64.2		10-150				6/27/23 20:48			
13C3-HFPO-DA	78.3		25-160				6/27/23 20:48			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-FB-02

Sampled: 6/6/2023 17:05

Sample ID: 23F0982-10

Sample Matrix: Field Blank

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	6/8/23	6/8/23 14:49	LL

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Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-EB-01

Sampled: 6/6/2023 17:10

Sample ID: 23F0982-11

Sample Matrix: Equipment Blank Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	4.2	1.5	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.1	0.37	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorohexanoic acid (PFHxA)	ND	1.1	0.23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluoroheptanoic acid (PFHpA)	ND	1.1	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorooctanoic acid (PFOA)	ND	1.1	0.24	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorononanoic acid (PFNA)	ND	1.1	0.20	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorodecanoic acid (PFDA)	ND	1.1	0.19	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluoroundecanoic acid (PFUnA)	ND	1.1	0.29	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorododecanoic acid (PFDoA)	ND	1.1	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	1.1	0.29	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	1.1	0.26	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	1.1	0.27	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	1.1	0.25	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	1.1	0.22	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.1	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	1.1	0.34	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorononanesulfonic acid (PFNS)	ND	1.1	0.31	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	1.1	0.33	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	1.1	0.28	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.2	0.73	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	4.2	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.2	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	1.1	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	1.1	0.44	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	1.1	0.32	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
N-MeFOSAA (NMeFOSAA)	ND	1.1	0.46	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
N-EtFOSAA (NEtFOSAA)	ND	1.1	0.23	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	11	2.8	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	11	2.6	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.2	1.1	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.2	0.72	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
9Cl-PF3ONS (F53B Minor)	ND	4.2	0.90	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
11Cl-PF3OUDs (F53B Major)	ND	4.2	1.0	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	11	1.9	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	53	11	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	53	9.3	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.1	0.52	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.1	0.52	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-EB-01

Sampled: 6/6/2023 17:10

Sample ID: 23F0982-11

Sample Matrix: Equipment Blank Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.1	0.42	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.1	0.91	ng/L	1		Draft Method 1633	6/20/23	6/27/23 21:35	AMS
Surrogates	% Recovery		Recovery Limits		Flag/Qual					
13C4-PFBA	80.4		10-130				6/27/23 21:35			
13C5-PFPeA	79.9		35-150				6/27/23 21:35			
13C5-PFHxA	79.6		55-150				6/27/23 21:35			
13C4-PFHpA	77.8		55-150				6/27/23 21:35			
13C8-PFOA	77.9		60-140				6/27/23 21:35			
13C9-PFNA	78.7		55-140				6/27/23 21:35			
13C6-PFDA	77.3		50-140				6/27/23 21:35			
13C7-PFUnA	71.2		30-140				6/27/23 21:35			
13C2-PFDoA	70.4		10-150				6/27/23 21:35			
13C2-PFTeDA	69.1		10-130				6/27/23 21:35			
13C3-PFBS	78.3		55-150				6/27/23 21:35			
13C3-PFHxS	78.2		55-150				6/27/23 21:35			
13C8-PFOS	77.8		45-140				6/27/23 21:35			
13C2-4:2FTS	68.4		60-200				6/27/23 21:35			
13C2-6:2FTS	71.4		60-200				6/27/23 21:35			
13C2-8:2FTS	71.1		50-200				6/27/23 21:35			
13C8-PFOSA	69.9		30-130				6/27/23 21:35			
D3-NMeFOSA	61.0		15-130				6/27/23 21:35			
D5-NEtFOSA	58.8		10-130				6/27/23 21:35			
D3-NMeFOSAA	71.9		45-200				6/27/23 21:35			
D5-NEtFOSAA	75.2		10-200				6/27/23 21:35			
D7-NMeFOSE	65.4		10-150				6/27/23 21:35			
D9-NEtFOSE	65.6		10-150				6/27/23 21:35			
13C3-HFPO-DA	78.3		25-160				6/27/23 21:35			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Brighton, NY

Sample Description:

Work Order: 23F0982

Date Received: 6/8/2023

Field Sample #: 828149-EB-01

Sampled: 6/6/2023 17:10

Sample ID: 23F0982-11

Sample Matrix: Equipment Blank Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	mg/L	1		Draft Method 1633	6/8/23	6/8/23 14:49	LL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
23F0982-10 [828149-FB-02]	B342706	50.0	06/08/23
23F0982-11 [828149-EB-01]	B342706	50.0	06/08/23

Prep Method:Draft Method 1633

Analytical Method:Draft Method 1633

Leachates were extracted on 6/12/2023 per NO PREP in Batch B342913

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0982-01 [828149-MW-3]	B342876	484	5.00	06/20/23
23F0982-02 [828149-DP-15]	B342876	5.00	5.00	06/20/23
23F0982-03 [828149-GEMW-2]	B342876	50.0	5.00	06/20/23
23F0982-04 [828149-DP-18]	B342876	5.00	5.00	06/20/23
23F0982-05 [828149-DP-20]	B342876	506	5.00	06/20/23
23F0982-06 [828149-DP-19]	B342876	99.2	5.00	06/20/23
23F0982-07 [828149-MW-19B]	B342876	495	5.00	06/20/23
23F0982-08 [828149-MW-21B]	B342876	482	5.00	06/20/23
23F0982-09 [828149-DP-21]	B342876	487	5.00	06/20/23
23F0982-10 [828149-FB-02]	B342876	531	5.00	06/20/23
23F0982-11 [828149-EB-01]	B342876	474	5.00	06/20/23

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
23F0982-01 [828149-MW-3]	B342913	50.0	06/12/23
23F0982-02 [828149-DP-15]	B342913	25.0	06/12/23
23F0982-03 [828149-GEMW-2]	B342913	50.0	06/12/23
23F0982-04 [828149-DP-18]	B342913	20.0	06/12/23
23F0982-05 [828149-DP-20]	B342913	50.0	06/12/23
23F0982-06 [828149-DP-19]	B342913	50.0	06/12/23
23F0982-07 [828149-MW-19B]	B342913	50.0	06/12/23
23F0982-08 [828149-MW-21B]	B342913	50.0	06/12/23
23F0982-09 [828149-DP-21]	B342913	50.0	06/12/23

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch B342876 - Draft Method 1633									
Blank (B342876-BLK1)									
					Prepared: 06/09/23 Analyzed: 06/27/23				
Perfluorobutanoic acid (PFBA)	ND	4.0	ng/L						
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L						
Perfluorohexanoic acid (PFHxA)	ND	0.99	ng/L						
Perfluoroheptanoic acid (PFHpA)	ND	0.99	ng/L						
Perfluorooctanoic acid (PFOA)	ND	0.99	ng/L						
Perfluorononanoic acid (PFNA)	ND	0.99	ng/L						
Perfluorodecanoic acid (PFDA)	ND	0.99	ng/L						
Perfluoroundecanoic acid (PFUnA)	ND	0.99	ng/L						
Perfluorododecanoic acid (PFDoA)	ND	0.99	ng/L						
Perfluorotridecanoic acid (PFTrDA)	ND	0.99	ng/L						
Perfluorotetradecanoic acid (PFTeDA)	ND	0.99	ng/L						
Perfluorobutanesulfonic acid (PFBS)	ND	0.99	ng/L						
Perfluoropentanesulfonic acid (PFPeS)	ND	0.99	ng/L						
Perfluorohexanesulfonic acid (PFHxS)	ND	0.99	ng/L						
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.99	ng/L						
Perfluorooctanesulfonic acid (PFOS)	ND	0.99	ng/L						
Perfluorononanesulfonic acid (PFNS)	ND	0.99	ng/L						
Perfluorodecanesulfonic acid (PFDS)	ND	0.99	ng/L						
Perfluorododecanesulfonic acid (PFDoS)	ND	0.99	ng/L						
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	4.0	ng/L						
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.9	4.0	ng/L						J
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	4.0	ng/L						
Perfluorooctanesulfonamide (PFOSA)	ND	0.99	ng/L						
N-methyl perfluorooctanesulfonamide (NMeFOSA)	ND	0.99	ng/L						
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.99	ng/L						
N-MeFOSAA (NMeFOSAA)	ND	0.99	ng/L						
N-EtFOSAA (NEtFOSAA)	ND	0.99	ng/L						
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	ND	9.9	ng/L						
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.9	ng/L						
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	4.0	ng/L						
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	4.0	ng/L						
9Cl-PF3ONS (F53B Minor)	ND	4.0	ng/L						
11Cl-PF3OUdS (F53B Major)	ND	4.0	ng/L						
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.9	ng/L						
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	ng/L						
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	ng/L						
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	2.0	ng/L						
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L						
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L						
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L						
Surrogate: 13C4-PFBA	82.1		ng/L	98.9		83.0	10-130		

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342876 - Draft Method 1633
Blank (B342876-BLK1)

Prepared: 06/09/23 Analyzed: 06/27/23

Surrogate: 13C5-PFPeA	41.1		ng/L	49.4		83.1	35-150			
Surrogate: 13C5-PFHxA	20.1		ng/L	24.7		81.3	55-150			
Surrogate: 13C4-PFHpA	19.2		ng/L	24.7		77.9	55-150			
Surrogate: 13C8-PFOA	21.2		ng/L	24.7		85.7	60-140			
Surrogate: 13C9-PFNA	10.3		ng/L	12.4		83.1	55-140			
Surrogate: 13C6-PFDA	10.1		ng/L	12.4		81.7	50-140			
Surrogate: 13C7-PFUnA	10.2		ng/L	12.4		82.9	30-140			
Surrogate: 13C2-PFDoA	9.69		ng/L	12.4		78.4	10-150			
Surrogate: 13C2-PFTeDA	10.3		ng/L	12.4		83.7	10-130			
Surrogate: 13C3-PFBS	20.5		ng/L	24.7		83.1	55-150			
Surrogate: 13C3-PFHxS	19.9		ng/L	24.7		80.6	55-150			
Surrogate: 13C8-PFOS	19.6		ng/L	24.7		79.2	45-140			
Surrogate: 13C2-4:2FTS	35.0		ng/L	49.4		70.8	60-200			
Surrogate: 13C2-6:2FTS	37.1		ng/L	49.4		75.0	60-200			
Surrogate: 13C2-8:2FTS	38.6		ng/L	49.4		78.0	50-200			
Surrogate: 13C8-PFOA	20.7		ng/L	24.7		83.6	30-130			
Surrogate: D3-NMeFOSA	16.4		ng/L	24.7		66.2	15-130			
Surrogate: D5-NEtFOSA	15.8		ng/L	24.7		64.1	10-130			
Surrogate: D3-NMeFOSAA	40.6		ng/L	49.4		82.2	45-200			
Surrogate: D5-NEtFOSAA	41.5		ng/L	49.4		83.9	10-200			
Surrogate: D7-NMeFOSE	227		ng/L	247		91.9	10-150			
Surrogate: D9-NEtFOSE	200		ng/L	247		80.8	10-150			
Surrogate: 13C3-HFPO-DA	83.9		ng/L	98.9		84.9	25-160			

LCS (B342876-BS1)

Prepared: 06/09/23 Analyzed: 06/27/23

Perfluorobutanoic acid (PFBA)	101	4.0	ng/L	95.2		106	58-148			
Perfluoropentanoic acid (PFPeA)	51.0	2.0	ng/L	47.6		107	54-152			
Perfluorohexanoic acid (PFHxA)	25.0	0.99	ng/L	23.8		105	55-152			
Perfluoroheptanoic acid (PFHpA)	25.0	0.99	ng/L	23.8		105	54-154			
Perfluorooctanoic acid (PFOA)	24.9	0.99	ng/L	23.8		104	52-161			
Perfluorononanoic acid (PFNA)	25.0	0.99	ng/L	23.8		105	59-149			
Perfluorodecanoic acid (PFDA)	25.5	0.99	ng/L	23.8		107	52-147			
Perfluoroundecanoic acid (PFUnA)	25.0	0.99	ng/L	23.8		105	48-159			
Perfluorododecanoic acid (PFDoA)	25.3	0.99	ng/L	23.8		106	64-142			
Perfluorotridecanoic acid (PFTTrDA)	26.3	0.99	ng/L	23.8		111	49-148			
Perfluorotetradecanoic acid (PFTeDA)	25.0	0.99	ng/L	23.8		105	47-161			
Perfluorobutanesulfonic acid (PFBS)	22.2	0.99	ng/L	21.1		105	62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.2	0.99	ng/L	22.4		103	59-151			
Perfluorohexanesulfonic acid (PFHxS)	21.7	0.99	ng/L	21.8		99.8	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	24.9	0.99	ng/L	22.7		110	55-152			
Perfluorooctanesulfonic acid (PFOS)	23.3	0.99	ng/L	22.1		105	58-149			
Perfluorononanesulfonic acid (PFNS)	24.4	0.99	ng/L	22.9		107	52-148			
Perfluorodecanesulfonic acid (PFDS)	23.5	0.99	ng/L	23.0		102	51-147			
Perfluorododecanesulfonic acid (PFDoS)	23.8	0.99	ng/L	23.1		103	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	97.0	4.0	ng/L	89.3		109	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	96.6	4.0	ng/L	90.4		107	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	103	4.0	ng/L	91.6		112	63-152			
Perfluorooctanesulfonamide (PFOSA)	25.5	0.99	ng/L	23.8		107	61-148			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	23.1	0.99	ng/L	23.8		96.9	63-145			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342876 - Draft Method 1633
LCS (B342876-BS1)

Prepared: 06/09/23 Analyzed: 06/27/23

N-ethyl perfluorooctanesulfonamide (NEtFOSA)	22.9	0.99	ng/L	23.8		96.0	65-139			
N-MeFOSAA (NMeFOSAA)	26.1	0.99	ng/L	23.8		109	58-144			
N-EtFOSAA (NEtFOSAA)	25.2	0.99	ng/L	23.8		106	59-146			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	247	9.9	ng/L	238		104	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	251	9.9	ng/L	238		105	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	93.3	4.0	ng/L	95.2		97.9	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	81.4	4.0	ng/L	89.9		90.6	68-146			
9Cl-PF3ONS (F53B Minor)	84.6	4.0	ng/L	89.3		94.8	56-156			
11Cl-PF3OUDS (F53B Major)	85.1	4.0	ng/L	89.9		94.7	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	251	9.9	ng/L	238		105	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1280	50	ng/L	1190		108	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1230	50	ng/L	1190		104	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	42.2	2.0	ng/L	42.4		99.6	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	46.0	2.0	ng/L	47.6		96.6	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	45.4	2.0	ng/L	47.6		95.5	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	50.6	2.0	ng/L	47.6		106	48-161			
Surrogate: 13C4-PFBA	71.2		ng/L	99.2		71.8	10-130			
Surrogate: 13C5-PFPeA	35.9		ng/L	49.6		72.5	35-150			
Surrogate: 13C5-PFHxA	17.9		ng/L	24.8		72.1	55-150			
Surrogate: 13C4-PFHpA	17.3		ng/L	24.8		69.8	55-150			
Surrogate: 13C8-PFOA	18.2		ng/L	24.8		73.4	60-140			
Surrogate: 13C9-PFNA	8.78		ng/L	12.4		70.8	55-140			
Surrogate: 13C6-PFDA	8.58		ng/L	12.4		69.2	50-140			
Surrogate: 13C7-PFUnA	8.45		ng/L	12.4		68.1	30-140			
Surrogate: 13C2-PFDoA	8.27		ng/L	12.4		66.7	10-150			
Surrogate: 13C2-PFTeDA	8.35		ng/L	12.4		67.4	10-130			
Surrogate: 13C3-PFBS	18.2		ng/L	24.8		73.5	55-150			
Surrogate: 13C3-PFHxS	18.3		ng/L	24.8		73.8	55-150			
Surrogate: 13C8-PFOS	17.5		ng/L	24.8		70.6	45-140			
Surrogate: 13C2-4:2FTS	33.3		ng/L	49.6		67.2	60-200			
Surrogate: 13C2-6:2FTS	35.7		ng/L	49.6		71.9	60-200			
Surrogate: 13C2-8:2FTS	35.5		ng/L	49.6		71.5	50-200			
Surrogate: 13C8-PFOSA	16.5		ng/L	24.8		66.7	30-130			
Surrogate: D3-NMeFOSA	15.3		ng/L	24.8		61.8	15-130			
Surrogate: D5-NEtFOSA	15.8		ng/L	24.8		63.5	10-130			
Surrogate: D3-NMeFOSAA	33.3		ng/L	49.6		67.2	45-200			
Surrogate: D5-NEtFOSAA	34.2		ng/L	49.6		68.9	10-200			
Surrogate: D7-NMeFOSE	166		ng/L	248		66.8	10-150			
Surrogate: D9-NEtFOSE	167		ng/L	248		67.2	10-150			
Surrogate: 13C3-HFPO-DA	75.3		ng/L	99.2		76.0	25-160			

MRL Check (B342876-MRL1)

Prepared: 06/09/23 Analyzed: 06/27/23

Perfluorobutanoic acid (PFBA)	8.25	4.0	ng/L	7.92		104	44-157			
Perfluoropentanoic acid (PFPeA)	3.81	2.0	ng/L	3.96		96.1	57-148			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342876 - Draft Method 1633
MRL Check (B342876-MRL1)

Prepared: 06/09/23 Analyzed: 06/27/23

Perfluorohexanoic acid (PFHxA)	1.90	0.99	ng/L	1.98		95.8	62-149			
Perfluoroheptanoic acid (PFHpA)	1.79	0.99	ng/L	1.98		90.1	56-150			
Perfluorooctanoic acid (PFOA)	1.96	0.99	ng/L	1.98		99.2	57-161			
Perfluorononanoic acid (PFNA)	1.82	0.99	ng/L	1.98		91.7	53-157			
Perfluorodecanoic acid (PFDA)	1.79	0.99	ng/L	1.98		90.3	43-158			
Perfluoroundecanoic acid (PFUnA)	1.84	0.99	ng/L	1.98		93.1	50-155			
Perfluorododecanoic acid (PFDoA)	1.92	0.99	ng/L	1.98		96.7	60-141			
Perfluorotridecanoic acid (PFTrDA)	1.97	0.99	ng/L	1.98		99.4	52-140			
Perfluorotetradecanoic acid (PFTeDA)	1.91	0.99	ng/L	1.98		96.2	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.68	0.99	ng/L	1.76		95.5	63-145			
Perfluoropentanesulfonic acid (PFPeS)	1.74	0.99	ng/L	1.86		93.3	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.82	0.99	ng/L	1.81		100	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	1.80	0.99	ng/L	1.89		95.4	51-150			
Perfluorooctanesulfonic acid (PFOS)	1.89	0.99	ng/L	1.84		103	43-162			
Perfluorononanesulfonic acid (PFNS)	1.69	0.99	ng/L	1.91		88.7	46-151			
Perfluorodecanesulfonic acid (PFDS)	1.74	0.99	ng/L	1.91		90.9	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.80	0.99	ng/L	1.92		93.7	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	7.15	4.0	ng/L	7.43		96.2	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	6.72	4.0	ng/L	7.53		89.3	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	7.05	4.0	ng/L	7.63		92.5	46-165			
Perfluorooctanesulfonamide (PFOSA)	1.97	0.99	ng/L	1.98		99.4	47-163			
N-methyl perfluorooctanesulfonamide (NMeFOSA)	1.96	0.99	ng/L	1.98		99.1	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	1.81	0.99	ng/L	1.98		91.5	49-156			
N-MeFOSAA (NMeFOSAA)	1.86	0.99	ng/L	1.98		93.9	32-160			
N-EtFOSAA (NEtFOSAA)	1.78	0.99	ng/L	1.98		90.0	51-154			
N-methylperfluorooctanesulfonamidoethanol (NMeFOSE)	18.1	9.9	ng/L	19.8		91.3	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	18.1	9.9	ng/L	19.8		91.3	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	6.94	4.0	ng/L	7.92		87.6	58-154			
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	6.42	4.0	ng/L	7.48		85.8	61-148			
9Cl-PF3ONS (F53B Minor)	6.65	4.0	ng/L	7.43		89.5	44-167			
11Cl-PF3OUDS (F53B Major)	6.55	4.0	ng/L	7.48		87.6	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	18.8	9.9	ng/L	19.8		95.0	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid (FPePA)(5:3FTCA)	100	50	ng/L	99.0		101	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	98.2	50	ng/L	99.0		99.2	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	3.27	2.0	ng/L	3.53		92.7	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.57	2.0	ng/L	3.96		90.2	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.42	2.0	ng/L	3.96		86.4	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.19	2.0	ng/L	3.96		106	47-160			
Surrogate: 13C4-PFBA	71.7		ng/L	99.0		72.3	10-130			
Surrogate: 13C5-PFPeA	36.0		ng/L	49.5		72.6	35-150			
Surrogate: 13C5-PFHxA	17.5		ng/L	24.8		70.8	55-150			

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QUALITY CONTROL
Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342876 - Draft Method 1633
MRL Check (B342876-MRL1)

Prepared: 06/09/23 Analyzed: 06/27/23

Surrogate: 13C4-PFHpA	17.3		ng/L	24.8		70.0	55-150			
Surrogate: 13C8-PFOA	17.3		ng/L	24.8		70.0	60-140			
Surrogate: 13C9-PFNA	8.70		ng/L	12.4		70.3	55-140			
Surrogate: 13C6-PFDA	8.48		ng/L	12.4		68.5	50-140			
Surrogate: 13C7-PFUnA	8.23		ng/L	12.4		66.4	30-140			
Surrogate: 13C2-PFDoA	7.93		ng/L	12.4		64.1	10-150			
Surrogate: 13C2-PFTeDA	8.40		ng/L	12.4		67.9	10-130			
Surrogate: 13C3-PFBS	17.9		ng/L	24.8		72.3	55-150			
Surrogate: 13C3-PFHxS	17.4		ng/L	24.8		70.2	55-150			
Surrogate: 13C8-PFOS	17.0		ng/L	24.8		68.9	45-140			
Surrogate: 13C2-4:2FTS	30.5		ng/L	49.5		61.6	60-200			
Surrogate: 13C2-6:2FTS	33.2		ng/L	49.5		67.1	60-200			
Surrogate: 13C2-8:2FTS	33.7		ng/L	49.5		68.1	50-200			
Surrogate: 13C8-PFOSA	17.0		ng/L	24.8		68.7	30-130			
Surrogate: D3-NMeFOSA	14.5		ng/L	24.8		58.4	15-130			
Surrogate: D5-NEtFOSA	13.7		ng/L	24.8		55.4	10-130			
Surrogate: D3-NMeFOSAA	33.8		ng/L	49.5		68.2	45-200			
Surrogate: D5-NEtFOSAA	36.0		ng/L	49.5		72.6	10-200			
Surrogate: D7-NMeFOSE	184		ng/L	248		74.2	10-150			
Surrogate: D9-NEtFOSE	165		ng/L	248		66.6	10-150			
Surrogate: 13C3-HFPO-DA	73.4		ng/L	99.0		74.1	25-160			

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QUALITY CONTROL
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch B342913 - Draft Method 1633
Blank (B342913-BLK1)

Prepared & Analyzed: 06/12/23

Total Suspended Solids	ND	5.0	mg/L							

LCS (B342913-BS1)

Prepared & Analyzed: 06/12/23

Total Suspended Solids	188	5.0	mg/L	200		94.0	64.1-125			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>Draft Method 1633 in Water</i>	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NH-P,PA,WV
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV

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Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2023
NC	North Carolina Div. of Water Quality	652	12/31/2023
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2023
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

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6/8/2023 at 9:51 am

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6/7/2023 3:13 PM

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6/8/2023 7:40 AM

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WINDSOR LOCKS, CT

6/8/2023 7:51 AM

DELIVERED

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ENV-FRM-ELON-0001 V05 Sample Receiving Checklist

Log In Back-Sheet

Login Sample Receipt Checklist - (Rejection Criteria Listing
- Using Acceptance Policy) Any False statement will be
brought to the attention of the Client - True or False



Client EA Engineering
Project Town & Country Dry Cleaners

MCP/RCP Required N/A

Deliverable Package Requirement CAT B

Location Brighton, NY

PWSID# (When Applicable) N/A

Arrival Method:

Courier ☐ Fed Ex ☒ Walk In ☐ Other ☐

Received By / Date / Time AAM/6-8-23/0951

Back-Sheet By / Date / Time AAM/6-8-23/1147

Temperature Method Temp Gun #4

Temp ☒ < 6°C Actual Temperature 4.0°C

Rush Samples: Yes / ☒ No Notify

Short Hold: Yes / ☒ No Notify

Notes regarding Samples/COC outside of SOP:

	True	False
Received on Ice	☒	☐
Received in Cooler	☒	☐
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Splitting Samples Required	☐	☒
MS/MSD	☐	☒
Trip Blanks	☐	☒
Lab to Filters	☐	☒
COC Legible	☒	☐

COC Included: (Check all included)

Client ☒ Analysis ☒ Sampler Name ☒
Project ☒ IDs ☒ Collection Date/Time ☒

All Samples Proper pH: N/A ☐ ☐

Additional Container Notes

Sample	Soils Jars (Circle Amb/Clear)				Ambers				Plastics						VOA Vials						Other / Fill in					
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	1 Liter	250mL	100mL	1 Liter	500mL	250mL	Unpreserved	Sulfuric	Unpreserved	Trizma	Sulfuric	Nitric	NaOH	NaOH/Zinc	Unpreserved	HCl	MeOH	D.I. Water	Bisulfate	Col/Bact	125mL Plastic	
1																										
2																										
3																										
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DATA VALIDATION REPORT

NYSDEC Town & Country Dry Cleaners

SDGs: 23F0711, 23F0714, 24F0975 and 23F0982

Chemical Analyses Performed by:

**Con-Test
Pace Analytical Laboratory**

Prepared by

ENVIRONMENTAL DATA SERVICES, LTD.

Prepared for

EA Engineering, Science and Technology, Inc.

September 15, 2023



DATA USABILITY SUMMARY REPORT FOR PER-FLUORINATED ALKYL ACIDS

PROJECT: NYSDEC Town and Country Dry Cleaners

CLIENT: EA Engineering, Science, and Technology, Inc.

LABORATORY: Con-Test, A Pace Analytical Laboratory

SAMPLE DELIVERY GROUP: 23F0711

SAMPLE DATES: 06/05/2023

This sample delivery group consists of the following samples:

Client Sample ID	Laboratory Sample ID
828149-MW-13	23F0711-01
828149-MW-13B	23F0711-02
828149-MW-2	23F0711-03
828149-MW-17B	23F0711-04
828149-DP-17	23F0711-05
828149-FD-01	23F0711-06
828149-FB-01	23F0711-07

Performance criteria specified in the analytical method, USEPA Draft Method 1633, Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS, August 2021; as well as the New York Department of Environmental Conservation Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, January 2021, have been considered during validation of this data and its usability.

Table 1 provides a summary of major and minor data quality issues identified for this data set. All data are acceptable except those results which have been qualified with "R," rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

Per USEPA Region 2 Validation Guidance, "All data users should note two facts. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables even as a last resort. The second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error."

1. HOLDING TIME/SAMPLE HANDLING

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Proper sample handling and preservation also play a role in the chemical stability of analytes in the sample matrix. If samples are not collected and stored using proper containers and/or preservatives, data may not be valid.

The samples in this sample delivery group (SDG) were received by the laboratory within the proper temperature range. All holding time criteria were met.

2. BLANK CONTAMINATION

Quality assurance blanks include method, storage, trip, field, or rinse blanks. Blanks are prepared to identify any contamination, which may have been introduced into the samples during laboratory preparation and analysis or field activity. Method and storage blanks measure laboratory contamination. Trip blanks measure cross contamination during shipment. Field and rinse blanks measure cross contamination during field operations.

Method Blanks

Method blanks were prepared and analyzed in association with the samples in this SDG at the specified frequency. No problems were found for this criterion.

Calibration Blanks

No problems were found for this criterion with the following exceptions. The analytes listed in the table below were positively identified in the initial calibration blank (ICB) associated with all samples in this SDG. Results reported for the impacted analytes in the associated samples have been evaluated and validation action was not required on this basis.

<i>PFTTrDA</i>	<i>PFTeDA</i>	<i>PFHxS</i>
<i>6:2 FTS</i>	<i>NMeFOSA</i>	<i>NMeFOSE</i>
<i>NetFOSE</i>	<i>11Cl-PF3OUdS</i>	<i>7:3 FTCA</i>

Field Blanks

Sample 828149-FB-01 was submitted as a field blank in association with the samples in this SDG. No problems were found with this criterion.

3. CALIBRATION

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative results. The initial calibration curve demonstrates that the instrument is capable of giving acceptable performance at the beginning of an analytical sequence. The continuing calibration verifies that the instrument is continuing to provide satisfactory daily performance. Additionally, a continuing calibration is analyzed at the end of each 12-hour analytical sequence, denoted as a “closing” calibration verification and ascertains acceptable performance at the conclusion of the analytical sequence.

Percent Relative Standard Deviation and Percent Deviation

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate stability of a specific compound over the calibration range. Percent deviation (%D) compares the response factor of the continuing calibration with the mean response factor of the initial calibration. Therefore, %D is a measure of the instrument's daily performance.

An RSD value outside the initial calibration limit indicates the potential for quantitation errors. For this reason, all positive and non-detected results are qualified as estimated. Severe performance failures (RSD >90%) requires rejection of non-detected results. The following QC criteria have been applied for this project: The %RSD of initial calibration must be <20%.

The %D for all analytes in the continuing calibration must be <30% with the exception of the lowest level continuing calibration which must have all a %D for all analytes <50%. A value outside these limits indicates the potential for detection and quantitation errors. For these reasons, all positive results are qualified as estimated "J," and non-detects are qualified with "UJ."

All initial calibration and continuing calibration %RSD and %D values were within defined QC criteria for all target analytes.

4. ISOTOPE DILUTION STANDARDS / SURROGATES

All samples are spiked with isotope dilution or surrogate compounds prior to sample preparation and analyses to evaluate overall laboratory performance and efficiency of the analytical technique.

No problems were found for this criterion with the following exception.

The observed isotope dilution standard recovery for labeled standard 13C4-PFBA in sample 828149-DP-17 was extremely low (less than 10%). The positive result reported for associated target analyte in the impacted sample has been qualified rejected "R" per validation guidance.

5. COMPOUND IDENTIFICATION

Per-fluorinated Compounds

The project target analyte compounds are identified on the LC/MS/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have ion spectra with primary and when available secondary characteristic ions present. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

All samples were evaluated at a Stage level 4.

The actual ratios of quantifier ion to qualifier ion or the laboratory's criteria were not provided by the laboratory for evaluation. In addition, signal to noise ratios for quantifier ions were not provided by the laboratory for evaluation. Therefore, these criteria were not assessed.

6. MATRIX SPIKE/MATRIX DUPLICATE

The matrix spike and matrix spike duplicate (MS/MSD) are generated to determine the precision and accuracy of the analytical procedure in a given sample matrix. A matrix duplicate sample analysis is performed to determine long-term precision of the analytical method in a given matrix. The relative percent difference (RPD) between the sample and its duplicate may be used to qualify data.

Sample 828149-MW-17B was submitted for MS/MSD evaluation in association with this SDG. Upon evaluation all accuracy and precision indicators were acceptable.

7. LABORATORY CONTROL SAMPLE

The Laboratory Control Sample (LCS) is spiked with the same analytes at the same concentrations as the matrix spike. The LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

No problems were found for this criterion.

8. REPORTING

No problems were found for this criterion.

9. OTHER QUALITY CONTROL DATA OUT OF SPECIFICATION

None.

10. FIELD DUPLICATE

Field duplicates are two (or more) field samples collected at the same time in the same location. Each of the samples represents the same population and is carried through all steps of the sampling and analytical procedures in an identical manner. Field duplicate results are used to assess precision of the total method, including sampling, analysis, and site heterogeneity.

Samples 828149-MW-2 and 828149-FD-01 were analyzed as a field duplicate pair in association with this SDG. Upon evaluation adequate field precision was demonstrated.

11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, the laboratory data generated met the project goals and quality control criteria, with the exceptions identified in this report and as summarized in Table 1.

Table 1
Review Elements Summary

	Were acceptance criteria met?		
	Yes	No	
Per-fluorinated Compounds		Major	Minor
Holding Time/Sample Handling	x		
Method Blanks / Calibration Blanks	x		
Field Blanks	x		
Calibration Percent Relative Standard Deviation and Percent Difference	x		
Isotope Dilution Standards / Surrogates		x	
Compound Identification	x		
Matrix Spike/Matrix Duplicate	x		
Laboratory Control Sample	x		
Other Quality Control Data out of Specification	x		
Field Duplicate	x		

Major= Major data quality issue identified resulting in rejection of data.

Minor= Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.

NA = Not applicable

Table 2
Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
EMPC	The result is an estimated maximum potential concentration.

Table 3
PFAS Definitions Table

	CAS Number	Compound	Abbreviation(s)
1	151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA, PFECA B
2	113507-82-7	Perfluoro (2-ethoxyethane) sulfonic acid	PFEESA, PES
3	4151-50-2	N-ethylperfluoro-1-octanesulfonamide	NEtFOSA, NEtPFOSA
4	31506-32-8	N-methylperfluoro-1octanesulfonamide	NMeFOSA, NMePFOSA
5	377-73-1	Perfluoro-3-methoxypropanoic acid	PFMPA, PRMOPrA, PFECA F
6	375-73-5	Perfluorobutanesulfonic acid	PFBS
7	863090-89-5	Perfluoro-4-methoxybutanoic acid	PFMBA, PFMOBA, PFECA A
8	2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA
9	13252-13-6	Hexafluoropropylene Oxide Dimer Acid	HFPO-DA, Gen-X, HFPODA
10	2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA
11	375-22-4	Perfluorobutanoic acid	PFBA
12	335-67-1	Perfluorooctanoic acid	PFOA
13	2706-91-4	Perfluoropentanesulfonic acid	PFPeS
14	754-91-6	Perfluorooctanesulfonamide	FOSA, PFOSA
15	1763-23-1	Perfluorooctanesulfonic acid	PFOS
16	2706-90-3	Perfluoropentanoic acid	PFPeA
17	2058-94-8	Perfluoroundecanoic acid	PFUnA, PFUnDA
18	376-06-7	Perfluorotetradecanoic acid	PFTeA, PFTeDA
19	72629-94-8	Perfluorotridecanoic acid	PFTriA, PFTrDA
20	375-95-1	Perfluorononanoic acid	PFNA
21	79780-39-5	Perfluorododecanesulfonic acid	PFDoS
22	307-55-1	Perfluorododecanoic acid	PFDoA, PFDoDA
23	335-77-3	Perfluorodecanesulfonic acid	PFDS
24	335-76-2	Perfluorodecanoic acid	PFDA
25	375-92-8	Perfluoroheptanesulfonic Acid	PFHpS
26	307-24-4	Perfluorohexanoic acid	PFHxA
27	68259-12-1	Perfluorononanesulfonic acid	PFNS
28	375-85-9	Perfluoroheptanoic acid	PFHpA
29	355-46-4	Perfluorohexanesulfonic acid	PFHxS
30	763051-92-9	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11CL-PF3Ouds, F-53 Minor
31	27619-97-2	6:2-Fluorotelomersulfonic acid	6:2 FTS
32	812-70-4	7:3 Fluorotelomer carboxylic acid	7:3 FTCA
33	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS
34	39108-34-4	8:2-Fluotelomersulfonic acid	8:2 FTS
35	914637-49-3	5:3 Fluorotelomer carboxylic acid	5:3 FTCA
36	1691-99-2	2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	NEtPFOSAE, NEtFOSE
37	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid	DONA, ADONA
38	757124-72-4	4:2-Fluorotelomersulfonic acid	4:2 FTS

	CAS Number	Compound	Abbreviation(s)
39	24448-09-7	2-(N-methylperfluoro-1-octanesulfonamido) ethanol	NMePFOSAE, NMeFOSE
40	356-02-5	3-Perfluoropropylpropanoic acid	3:3 FTCA



DATA USABILITY SUMMARY REPORT FOR 1,4-DIOXANE

PROJECT: NYSDEC Town and Country Dry Cleaners

CLIENT: EA Engineering, Science, and Technology, Inc.

LABORATORY: Con-Test, A Pace Analytical Laboratory

SAMPLE DELIVERY GROUPS: 23F0714

SAMPLE DATES: 06/5/2023

The above sample delivery group (SDG) consist of the following samples:

Client Sample ID	Laboratory Sample ID
828149-MW-13	23F0714-01
828149-MW-13B	23F0714-02
828149-DP-17	23F0714-03
828149-MW-2	23F0714-04
828149-MW-17B	23F0714-05
828149-FD-01	23F0714-06

The samples described above were analyzed via USEPA SW-846 8270E SIM to determine the concentrations of 1,4-dioxane. The method was modified to include isotopic dilution quantitation.

Project specific quality assurance (QA) objectives, as well as the USEPA Region II SOP, Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8270D, HW-22 Revision 5, December 2010, have been considered during validation of this data and its usability.

Table 1 provides a summary of major and minor data quality issues identified for this data set. All data are acceptable except those results which have been qualified with "R," rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

Per USEPA Region 2 Validation Guidance, "All data users should note two facts. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables even as a last resort. The second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error."

1. HOLDING TIME/SAMPLE HANDLING

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Proper sample handling and preservation also play a role in the chemical stability of analytes in the sample matrix. If samples are not collected and stored using proper containers and/or preservatives, data may not be valid.

The samples in this delivery group were received by the laboratory within the proper temperature range as specified in the validation guidance.

The samples in this delivery group were prepared and analyzed within the holding time specified in the validation guidelines.

2. BLANK CONTAMINATION

Quality assurance blanks include method, storage, trip, field, or rinse blanks. Blanks are prepared to identify any contamination, which may have been introduced into the samples during laboratory preparation and analysis or field activity. Method and storage blanks measure laboratory contamination. Trip blanks measure cross contamination during shipment. Field and rinse blanks measure cross contamination during field operations.

Method Blanks

No problems were found for this criterion.

Field Blanks

No field blanks were submitted in association with this SDG.

3. MASS SPECTROMETER TUNING

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances.

The tuning standard for semivolatiles is decafluorotriphenylphosphine (DFTPP).

All instrument tunes were fully compliant.

4. CALIBRATION

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative results. The initial calibration curve demonstrates that the instrument is capable of giving acceptable performance at the beginning of an analytical sequence. The continuing calibration verifies that the instrument is continuing to provide satisfactory daily performance. Additionally, a continuing calibration is analyzed at the end of each 12-hour analytical sequence, denoted as a “closing” calibration verification and ascertains acceptable performance at the conclusion of the analytical sequence.

Response Factor

The relative response factor (RRF) measures the instrument's responses to specific chemical compounds. The response factors for the base neutral acid (BNA) target compound list (TCL) analytes must be ≥ 0.05 in both the initial and continuing calibrations. A value less than the respective criteria indicates serious detection and quantitation problems. If the mean RRF of the initial calibration or the continuing calibration RRF is < 0.05 for any analyte, those analytes detected in environmental samples will be qualified as estimated. All non-detects for those analytes will be rejected.

The RRF values in all initial and continuing calibrations were found to be acceptable in all cases.

Note: No closing continuing calibration was performed.

Percent Relative Standard Deviation and Percent Deviation

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate stability of a specific compound over the calibration range. Percent deviation (%D) compares the response factor of the continuing calibration with the mean response factor of the initial calibration. Therefore, %D is a measure of the instrument's daily performance.

The following QC criteria have been applied for this project:

The %RSD of initial calibration must be $< 20\%$.

An RSD value outside the initial calibration limit indicates the potential for quantitation errors. For this reason, all positive and non-detected results are qualified as estimated. Severe performance failures (RSD $> 90\%$) requires rejection of non-detected results.

The %D for continuing calibration must be $< 20\%$.

A value outside these limits indicates the potential for detection and quantitation errors. For these reasons, all positive results are qualified as estimated "J," and non-detects are qualified with "UJ."

All initial calibration and continuing calibration %RSD and %D values were within defined quality control criteria without exception.

Note: No closing continuing calibration was performed.

5. INTERNAL STANDARDS PERFORMANCE

Internal standard performance criteria are meant to ensure that the gas chromatograph/mass spectrometer (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than ± 30 seconds from the associated continuing calibration standard. The area count must be within -50% to 200% range of the associated standard. If area count is $> 200\%$, non-detected results are not qualified while positive results are qualified "J," estimated. When an observed area count is $< 50\%$, results are qualified "J" or "UJ" as appropriate; however, should area counts be $< 25\%$, all associated non-detects are qualified "R," rejected.

The reported sample analyses and associated method blank had internal standard areas and retention times within QC criteria in all cases.

6. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation and analyses to evaluate overall laboratory performance and efficiency of the analytical technique.

The reported sample analyses and method blank had observed surrogate recoveries within the limits established by the laboratory in all cases.

7. COMPOUND IDENTIFICATION

Semivolatile

The project target analyte compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have ion spectra which has a ratio of the primary and secondary ion intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

All identification criteria were met. Therefore, no analytes were qualified for compound identification.

8. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The matrix spike and matrix spike duplicate (MS/MSD) are generated to determine the precision and accuracy of the analytical procedure in a given sample matrix.

Sample 828149-MW-17B was submitted for MS/MSD evaluation in association with this SDG. Upon evaluation all precision and accuracy indicators were favorable.

9. LABORATORY CONTROL SAMPLE

The Laboratory Control Sample (LCS) is spiked with the same analytes at the same concentrations as the matrix spike. The LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

No problems were found for this criterion.

10. REPORTING

No dilutions, re-extractions, or other re-analyses were performed.

11. OTHER QUALITY CONTROL DATA OUT OF SPECIFICATION

No problems were found for this criterion.

12. FIELD DUPLICATE

Field duplicates are two (or more) field samples collected at the same time in the same location. Each of the samples represents the same population and is carried through all steps of the sampling and analytical procedures in an identical manner. Field duplicate results are used to assess precision of the total method, including sampling, analysis, and site heterogeneity.

Samples 828149-MW-2 and 828149-FD-01 were analyzed as a field duplicate pair in association with this SDG. Adequate field precision was demonstrated.

13. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, the laboratory data generated met the project goals and quality control criteria, with the exceptions identified in this report and as summarized in Table 1.

Table 1
Review Elements Summary

	Were acceptance criteria met?		
	Yes	No	
1,4-Dioxane		Major	Minor
Holding Time/Sample Handling	x		
Method Blanks	x		
Field Blanks	NA		
Mass Spectrometer Tuning	x		
Calibration Response Factor	x		
Calibration Percent Relative Standard Deviation and Percent Difference	x		
Internal Standards Performance	x		
Surrogates	x		
Compound Identification - Semivolatile	x		
Tentatively Identified Compounds - Semivolatile	NA		
Matrix Spike/Matrix Spike Duplicate	x		
Laboratory Control Sample	x		
Other Quality Control Data out of Linear Range	NA		
Field Duplicate	x		

Major= Major data quality issue identified resulting in rejection of data.

Minor= Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.

NA = Not applicable

Table 2
Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
UJ-	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise, and the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.



DATA USABILITY SUMMARY REPORT FOR VOLATILES

PROJECT: NYSDEC Town and Country Dry Cleaners

CLIENT: EA Engineering, Science, and Technology, Inc.

LABORATORY: Con-Test, A Pace Analytical Laboratory

SAMPLE DELIVERY GROUPS: 23F0714

SAMPLE DATES: 06/5/2023

The above sample delivery group (SDG) consist of the following samples:

Client Sample ID	Laboratory Sample ID
828149-MW-13	23F0714-01
828149-MW-13B	23F0714-02
828149-DP-17	23F0714-03
828149-MW-2	23F0714-04
828149-MW-17B	23F0714-05
828149-FD-01	23F0714-06
818149-TB-01	23F0714-07

The samples described above were analyzed via USEPA SW-846 8260D to determine the concentrations of low/medium volatile organic analytes (VOAs).

Project specific quality assurance (QA) objectives, as well as the USEPA Region II SOP, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B & 8260C, SOP NO. HW-24 Revision 4, September 2014 have been considered during validation of this data and its usability.

Table 1 provides a summary of major and minor data quality issues identified for this data set. All data are acceptable except those results which have been qualified with "R," rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

Per USEPA Region 2 Validation Guidance, "All data users should note two facts. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables even as a last resort. The second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error."

1. HOLDING TIME/SAMPLE HANDLING

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Proper sample handling and preservation also play a role in the chemical stability of analytes in the sample matrix. If samples are not collected and stored using proper containers and/or preservatives, data may not be valid.

The samples in this sample delivery group (SDG) were received by the laboratory within the proper temperature range as specified in the validation guidance.

The samples in this SDG were prepared and analyzed within the holding time specified in the validation guidelines.

2. BLANK CONTAMINATION

Quality assurance blanks include method, storage, trip, field, or rinse blanks. Blanks are prepared to identify any contamination, which may have been introduced into the samples during preparation and analysis or field activity. Method and storage blanks measure laboratory contamination. Trip blanks measure cross contamination during shipment. Field and rinse blanks measure cross contamination during field operations.

Method Blanks

Method blanks were prepared and analyzed in association with the samples in these SDGs at the specified frequency. Upon examination of method blank data, no analyte was positively identified at a concentration equal to or above the method detection limit (MDL) in any associated method blank.

Storage Blanks

No storage blanks were submitted in association with this SDG.

Trip Blanks

No sample was submitted as a trip blank in association with this SDG.

Field Blanks

No sample was submitted as a field blank in association with this SDG.

3. MASS SPECTROMETER TUNING

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances.

The tuning standard for volatiles is bromofluorobenzene (BFB).

All tunes associated with these SDGs were fully compliant.

4. CALIBRATION

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative results. The initial calibration curve demonstrates that the instrument is capable of giving acceptable performance at the beginning of an analytical sequence. The continuing calibration verifies that the instrument is continuing to provide satisfactory daily performance. Additionally, a continuing calibration is analyzed at the end of each 12-hour analytical sequence, denoted as a “closing” calibration verification, and ascertains acceptable performance at the conclusion of the analytical sequence.

Response Factor

The relative response factor (RRF) measures the instruments responses to specific chemical compounds. The RRFs for the VOA target compound list (TCL) compounds must be greater than the RRFs listed in Region II validation guidelines. A value less than the respective criteria indicates serious detection and quantitation problems. If the mean RRF of the initial calibration or the continuing calibration RRF is below the specified limit for any analyte, those analytes detected in environmental samples will be qualified as estimated. All non-detects for those analytes will be rejected.

The RRF values in all initial and continuing calibrations for method 8260C were found to be acceptable in all cases.

Percent Relative Standard Deviation and Percent Deviation

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate stability of a specific compound over the calibration range. Percent deviation (%D) compares the response factor of the continuing calibration with the mean response factor of the initial calibration. Therefore, %D is a measure of the instrument's daily performance.

The following QC criteria have been applied for this project:

The %RSD of initial calibration must be $\leq 20\%$.

A %RSD value outside initial calibration limit indicates the potential for quantitation errors. For this reason, all positive results are qualified as estimated and non-detect results are qualified using professional judgement.

The %D for opening continuing calibration must be $\leq 30\%$

A value outside these limits indicates the potential for detection and quantitation errors. For these reasons, all positive results are qualified as “J,” estimated, and non-detects are qualified with “UJ.”

All initial calibration and continuing calibration %RSD and %D values were within defined QC criteria with the following exceptions.

The observed %D recoveries for tert-butyl alcohol and methyl acetate in one CCV associated with all samples were outside of the acceptable limit. The results reported for the impacted analytes in all samples have been qualified “UJ” on this basis.

Please note, the laboratory did not perform closing continuing calibration verifications. Therefore, those criteria were not evaluated during validation. No qualification was applied on this basis.

5. INTERNAL STANDARDS PERFORMANCE

Internal standard performance criteria are meant to ensure that the gas chromatography/mass spectrometry (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than +/- 30 seconds from the associated continuing calibration standard. The area count must be within -50% to +200% range of the associated standard. If area count is >200%, non-detected results are not qualified while positive results associated with the non-compliant internal standard are qualified "J," estimated. However, when an observed area count is <50%, positive results associated with the non-compliant are qualified "J," estimated, while non-detected results are rejected.

Internal standard area counts are within acceptance criteria for all samples.

6. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation and analyses to evaluate overall laboratory performance and efficiency of the analytical technique. The observed recovery must be within laboratory limits as outlined in the project specific validation guidance.

The reported sample analyses had observed surrogate recoveries within the established acceptance limits in all cases.

7. COMPOUND IDENTIFICATION

Volatile

The project target analyte compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have ion spectra which has a ratio of the primary and secondary ion intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

All samples were evaluated, and all identification criteria were met. Therefore, no analytes were qualified for compound identification.

Volatile Tentatively Identified Compounds

Tentatively Identified Compounds (TICs) were reported by the laboratory and reviewed for quality assurance. For all TIC results where there is presumptive evidence of a match, being greater than or equal to 85% match, the results are qualified "NJ," tentatively identified. If the non-target compound is reported as an unknown, the result is qualified "J," estimated. Likewise, if it is determined that the identification of a TIC is unacceptable, the tentative identification of the compound is changed to "unknown" and the result is qualified "J," estimated.

Volatile TICs were not reported.

8. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The matrix spike and matrix spike duplicate (MS/MSD) are generated to determine the precision and accuracy of the analytical procedure in a given sample matrix.

Sample 8281149-MW-17B was submitted for MS/MSD pair evaluation in association with this SDG. Upon evaluation precision and accuracy indicators were acceptable or did not result in a need to qualify sample results with the following exceptions. The observed MS and MSD recoveries for tert-butyl alcohol and methyl acetate were lower than the lowest acceptance limit. The non-detected results reported for the impacted analytes in the parent sample have been qualified "UJ" on this basis.

9. LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

The Laboratory Control Sample (LCS) is spiked with the same analytes at the same concentrations as the matrix spike. The LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

LCS/LCS duplicate evaluations were processed at the proper frequency. Upon evaluation all accuracy and precision criteria were acceptable.

10. REPORTING

No dilutions, re-extractions, or other re-analyses were performed other than those necessary to bring positive instrument signals within the linear range.

11. OTHER QUALITY CONTROL DATA OUT OF SPECIFICATION

The laboratory reported for 1,4-dioxane via SW 846 method 8260C and SW 846 method 8270 SIM. The results reported via SW 846 method 8260C were flagged as non-reportable by the data validator.

12. FIELD DUPLICATE

Field duplicates are two (or more) field samples collected at the same time in the same location. Each of the samples represents the same population and is carried through all steps of the sampling and analytical procedures in an identical manner. Field duplicate results are used to assess precision of the total method, including sampling, analysis, and site heterogeneity.

Samples 828149-MW-2 and 828149-FD-01 were analyzed as a field duplicate pair in association with these SDGs. Adequate field precision was demonstrated.

13. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, the laboratory data generated met the project goals and quality control criteria, with the exceptions identified in this report and as summarized in Table 1.

Table 1
Review Elements Summary

	Were acceptance criteria met?		
	Yes	No	
Volatiles		Major	Minor
Holding Time	x		
Method Blanks	x		
Storage Blanks	NA		
Trip Blanks	x		
Field Blanks	NA		
Mass Spectrometer Tuning	x		
Calibration Response Factor	x		
Calibration Percent Relative Standard Deviation and Percent Difference			x
Internal Standards	x		
Surrogates	x		
Compound Identification - Volatile	x		
Tentatively Identified Compounds - Volatile	NA		
Matrix Spike/Matrix Spike Duplicate			x
Laboratory Control Sample/Laboratory Control Sample Duplicate	x		
Other Quality Control Data out of Specification	x		
Field Duplicate	x		

Major= Major data quality issue identified resulting in rejection of data.

Minor= Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.

NA = Not applicable

Table 2
Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.



DATA USABILITY SUMMARY REPORT FOR 1,4-DIOXANE

PROJECT: NYSDEC Town and Country Dry Cleaners

CLIENT: EA Engineering, Science, and Technology, Inc.

LABORATORY: Con-Test, A Pace Analytical Laboratory

SAMPLE DELIVERY GROUPS: 23F0975

SAMPLE DATES: 06/06/2023

The above sample delivery group (SDG) consist of the following samples:

Client Sample ID	Laboratory Sample ID
828149-MW-3	23F0975-01
828149-DP-15	23F0975-02
828149-GEMW-2	23F0975-03
828149-DP-18	23F0975-04
828149-DP-20	23F0975-05
828149-DP-19	23F0975-06
828149-MW-19B	23F0975-07
828149-MW-21B	23F0975-08
828149-DP-21	23F0975-09

The samples described above were analyzed via USEPA SW-846 8270E SIM to determine the concentrations of 1,4-dioxane. The method was modified to include isotopic dilution quantitation.

Project specific quality assurance (QA) objectives, as well as the USEPA Region II SOP, Validating Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8270D, HW-22 Revision 5, December 2010, have been considered during validation of this data and its usability.

Table 1 provides a summary of major and minor data quality issues identified for this data set. All data are acceptable except those results which have been qualified with "R," rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

Per USEPA Region 2 Validation Guidance, "All data users should note two facts. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables even as a last resort. The second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error."

1. HOLDING TIME/SAMPLE HANDLING

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Proper sample handling and preservation also play a role in the chemical stability of analytes in the sample matrix. If samples are not collected and stored using proper containers and/or preservatives, data may not be valid.

The samples in this delivery group were received by the laboratory within the proper temperature range as specified in the validation guidance.

The samples in this delivery group were prepared and analyzed within the holding time specified in the validation guidelines.

2. BLANK CONTAMINATION

Quality assurance blanks include method, storage, trip, field, or rinse blanks. Blanks are prepared to identify any contamination, which may have been introduced into the samples during laboratory preparation and analysis or field activity. Method and storage blanks measure laboratory contamination. Trip blanks measure cross contamination during shipment. Field and rinse blanks measure cross contamination during field operations.

Method Blanks

No problems were found for this criterion.

Field Blanks

No field blanks were submitted in association with this SDG.

3. MASS SPECTROMETER TUNING

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances.

The tuning standard for semivolatiles is decafluorotriphenylphosphine (DFTPP).

All instrument tunes were fully compliant.

4. CALIBRATION

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative results. The initial calibration curve demonstrates that the instrument is capable of giving acceptable performance at the beginning of an analytical sequence. The continuing calibration verifies that the instrument is continuing to provide satisfactory daily performance. Additionally, a continuing calibration is analyzed at the end of each 12-hour analytical sequence, denoted as a “closing” calibration verification and ascertains acceptable performance at the conclusion of the analytical sequence.

Response Factor

The relative response factor (RRF) measures the instrument's responses to specific chemical compounds. The response factors for the base neutral acid (BNA) target compound list (TCL) analytes must be ≥ 0.05 in both the initial and continuing calibrations. A value less than the respective criteria indicates serious detection and quantitation problems. If the mean RRF of the initial calibration or the continuing calibration RRF is < 0.05 for any analyte, those analytes detected in environmental samples will be qualified as estimated. All non-detects for those analytes will be rejected.

The RRF values in all initial and continuing calibrations were found to be acceptable in all cases.

Note: No closing continuing calibration was performed.

Percent Relative Standard Deviation and Percent Deviation

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate stability of a specific compound over the calibration range. Percent deviation (%D) compares the response factor of the continuing calibration with the mean response factor of the initial calibration. Therefore, %D is a measure of the instrument's daily performance.

The following QC criteria have been applied for this project:

The %RSD of initial calibration must be $< 20\%$.

An RSD value outside the initial calibration limit indicates the potential for quantitation errors. For this reason, all positive and non-detected results are qualified as estimated. Severe performance failures (RSD $> 90\%$) requires rejection of non-detected results.

The %D for continuing calibration must be $< 20\%$.

A value outside these limits indicates the potential for detection and quantitation errors. For these reasons, all positive results are qualified as estimated "J," and non-detects are qualified with "UJ."

All initial calibration %RSD and continuing calibration %D values were within defined quality control criteria without exception.

Note: No closing continuing calibration was performed.

5. INTERNAL STANDARDS PERFORMANCE

Internal standard performance criteria are meant to ensure that the gas chromatograph/mass spectrometer (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than ± 30 seconds from the associated continuing calibration standard. The area count must be within -50% to 200% range of the associated standard. If area count is $> 200\%$, non-detected results are not qualified while positive results are qualified "J," estimated. When an observed area count is $< 50\%$, results are qualified "J" or "UJ" as appropriate; however, should area counts be $< 25\%$, all associated non-detects are qualified "R," rejected.

The reported sample analyses and associated method blank had internal standard areas and retention times within QC criteria in all cases.

6. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation and analyses to evaluate overall laboratory performance and efficiency of the analytical technique.

The reported sample analyses and method blank had observed surrogate recoveries within the limits established by the laboratory in all cases.

7. COMPOUND IDENTIFICATION

Semivolatile

The project target analyte compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have ion spectra which has a ratio of the primary and secondary ion intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

All identification criteria were met. Therefore, no analytes were qualified for compound identification.

8. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The matrix spike and matrix spike duplicate (MS/MSD) are generated to determine the precision and accuracy of the analytical procedure in a given sample matrix.

No samples were submitted for MS/MSD evaluation in association with this SDG.

9. LABORATORY CONTROL SAMPLE

The Laboratory Control Sample (LCS) is spiked with the same analytes at the same concentrations as the matrix spike. The LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

No problems were found for this criterion.

10. REPORTING

No dilutions, re-extractions, or other re-analyses were performed.

11. OTHER QUALITY CONTROL DATA OUT OF SPECIFICATION

No problems were found for this criterion.

12. FIELD DUPLICATE

Field duplicates are two (or more) field samples collected at the same time in the same location. Each of the samples represents the same population and is carried through all steps of the sampling and analytical procedures in an identical manner. Field duplicate results are used to assess precision of the total method, including sampling, analysis, and site heterogeneity.

No samples were analyzed as a field duplicate pair in association with this SDG.

13. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, the laboratory data generated met the project goals and quality control criteria, with the exceptions identified in this report and as summarized in Table 1.

Table 1
Review Elements Summary

	Were acceptance criteria met?		
	Yes	No	
1,4-Dioxane		Major	Minor
Holding Time/Sample Handling	x		
Method Blanks	x		
Field Blanks	NA		
Mass Spectrometer Tuning	x		
Calibration Response Factor	x		
Calibration Percent Relative Standard Deviation and Percent Difference	x		
Internal Standards Performance	x		
Surrogates	x		
Compound Identification - Semivolatile	x		
Tentatively Identified Compounds - Semivolatile	NA		
Matrix Spike/Matrix Spike Duplicate	NA		
Laboratory Control Sample	x		
Other Quality Control Data out of Linear Range	NA		
Field Duplicate	NA		

Major= Major data quality issue identified resulting in rejection of data.

Minor= Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.

NA = Not applicable

Table 2
Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
UJ-	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise, and the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.



DATA USABILITY SUMMARY REPORT FOR VOLATILES

PROJECT: NYSDEC Town and Country Dry Cleaners

CLIENT: EA Engineering, Science, and Technology, Inc.

LABORATORY: Con-Test, A Pace Analytical Laboratory

SAMPLE DELIVERY GROUPS: 23F0975

SAMPLE DATES: 06/06/2023

The above sample delivery group (SDG) consist of the following samples:

Client Sample ID	Laboratory Sample ID
828149-MW-3	23F0975-01
828149-DP-15	23F0975-02
828149-GEMW-2	23F0975-03
828149-DP-18	23F0975-04
828149-DP-20	23F0975-05
828149-DP-19	23F0975-06
828149-MW-19B	23F0975-07
828149-MW-21B	23F0975-08
828149-DP-21	23F0975-09
828149-TB-02	23F0975-10

The samples described above were analyzed via USEPA SW-846 8260D to determine the concentrations of low/medium volatile organic analytes (VOAs).

Project specific quality assurance (QA) objectives, as well as the USEPA Region II SOP, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B & 8260C, SOP NO. HW-24 Revision 4, September 2014 have been considered during validation of this data and its usability.

Table 1 provides a summary of major and minor data quality issues identified for this data set. All data are acceptable except those results which have been qualified with "R," rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

Per USEPA Region 2 Validation Guidance, "All data users should note two facts. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables even as a last resort. The second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error."

1. HOLDING TIME/SAMPLE HANDLING

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Proper sample handling and preservation also play a role in the chemical stability of analytes in the sample matrix. If samples are not collected and stored using proper containers and/or preservatives, data may not be valid.

The samples in this SDG were received by the laboratory within the proper temperature range as specified in the validation guidance.

The samples in this SDG were prepared and analyzed within the holding time specified in the validation guidelines.

2. BLANK CONTAMINATION

Quality assurance blanks include method, storage, trip, field, or rinse blanks. Blanks are prepared to identify any contamination, which may have been introduced into the samples during preparation and analysis or field activity. Method and storage blanks measure laboratory contamination. Trip blanks measure cross contamination during shipment. Field and rinse blanks measure cross contamination during field operations.

Method Blanks

Method blanks were prepared and analyzed in association with the samples in these SDGs at the specified frequency. Upon examination of method blank data, no analyte was positively identified at a concentration equal to or above the method detection limit (MDL) in any associated method blank.

Storage Blanks

No storage blanks were submitted in association with this SDG.

Trip Blanks

Sample 828149-TB-02 was submitted as a trip blank in association with all samples in this SDG. Acetone was positively detected. The results reported for the impacted analyte in the associated samples have been evaluated and qualified per validation guidance on this basis.

Field Blanks

No sample was submitted as a field blank in association with this SDG.

3. MASS SPECTROMETER TUNING

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances.

The tuning standard for volatiles is bromofluorobenzene (BFB).

All tunes associated with these SDGs were fully compliant.

4. CALIBRATION

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative results. The initial calibration curve demonstrates that the instrument is capable of giving acceptable performance at the beginning of an analytical sequence. The continuing calibration verifies that the instrument is continuing to provide satisfactory daily performance. Additionally, a continuing calibration is analyzed at the end of each 12-hour analytical sequence, denoted as a "closing" calibration verification, and ascertains acceptable performance at the conclusion of the analytical sequence.

Response Factor

The relative response factor (RRF) measures the instruments responses to specific chemical compounds. The RRFs for the VOA target compound list (TCL) compounds must be greater than the RRFs listed in Region II validation guidelines. A value less than the respective criteria indicates serious detection and quantitation problems. If the mean RRF of the initial calibration or the continuing calibration RRF is below the specified limit for any analyte, those analytes detected in environmental samples will be qualified as estimated. All non-detects for those analytes will be rejected.

The RRF values in all initial and continuing calibrations were found to be acceptable in all cases.

Percent Relative Standard Deviation and Percent Deviation

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate stability of a specific compound over the calibration range. Percent deviation (%D) compares the response factor of the continuing calibration with the mean response factor of the initial calibration. Therefore, %D is a measure of the instrument's daily performance.

The following QC criteria have been applied for this project:

The %RSD of initial calibration must be $\leq 20\%$.

A %RSD value outside initial calibration limit indicates the potential for quantitation errors. For this reason, all positive results are qualified as estimated and non-detect results are qualified using professional judgement.

The %D for opening continuing calibration must be $\leq 30\%$

A value outside these limits indicates the potential for detection and quantitation errors. For these reasons, all positive results are qualified as "J," estimated, and non-detects are qualified with "UJ."

All initial calibration %RSD and continuing calibration %D values were within defined QC criteria with the following exception.

An observed %D for tert-butyl alcohol in one continuing calibration verification (CCV) associated with all samples was outside of the acceptable limit. The results reported for impacted analyte in the associated samples have been qualified "UJ" on this basis.

Please note, the laboratory did not perform closing continuing calibration verifications. Therefore, those criteria were not evaluated during validation. No qualification was applied on this basis.

5. INTERNAL STANDARDS PERFORMANCE

Internal standard performance criteria are meant to ensure that the gas chromatography/mass spectrometry (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than +/- 30 seconds from the associated continuing calibration standard. The area count must be within -50% to +200% range of the associated standard. If area count is >200%, non-detected results are not qualified while positive results associated with the non-compliant internal standard are qualified "J," estimated. However, when an observed area count is <50%, positive results associated with the non-compliant are qualified "J," estimated, while non-detected results are rejected.

Internal standard area counts are within acceptance criteria for all samples.

6. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation and analyses to evaluate overall laboratory performance and efficiency of the analytical technique. The observed recovery must be within laboratory limits as outlined in the project specific validation guidance.

The reported sample analyses had observed surrogate recoveries within the established acceptance limits in all cases.

7. COMPOUND IDENTIFICATION

Volatile

The project target analyte compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have ion spectra which has a ratio of the primary and secondary ion intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

All samples were evaluated, and all identification criteria were met. Therefore, no analytes were qualified for compound identification.

Volatile Tentatively Identified Compounds

Tentatively Identified Compounds (TICs) were reported by the laboratory and reviewed for quality assurance. For all TIC results where there is presumptive evidence of a match, being greater than or equal to 85% match, the results are qualified "NJ," tentatively identified. If the non-target compound is reported as an unknown, the result is qualified "J," estimated. Likewise, if it is determined that the identification of a TIC is unacceptable, the tentative identification of the compound is changed to "unknown" and the result is qualified "J," estimated.

Volatile TICs were not reported.

8. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The matrix spike and matrix spike duplicate (MS/MSD) are generated to determine the precision and accuracy of the analytical procedure in a given sample matrix.

No samples were submitted for MS/MSD pair evaluation in association with this SDG.

9. LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE

The Laboratory Control Sample (LCS) is spiked with the same analytes at the same concentrations as the matrix spike. The LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

LCS/LCS duplicate evaluations were processed at the proper frequency. Upon evaluation all accuracy and precision criteria were acceptable.

10. REPORTING

No dilutions, re-extractions, or other re-analyses were performed other than those necessary to bring positive instrument signals within the linear range.

11. OTHER QUALITY CONTROL DATA OUT OF SPECIFICATION

No problems were found for this criterion.

12. FIELD DUPLICATE

Field duplicates are two (or more) field samples collected at the same time in the same location. Each of the samples represents the same population and is carried through all steps of the sampling and analytical procedures in an identical manner. Field duplicate results are used to assess precision of the total method, including sampling, analysis, and site heterogeneity.

No samples were analyzed as a field duplicate pair in association with these SDGs.

13. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, the laboratory data generated met the project goals and quality control criteria, with the exceptions identified in this report and as summarized in Table 1.

Table 1
Review Elements Summary

	Were acceptance criteria met?		
	Yes	No	
Volatiles		Major	Minor
Holding Time	x		
Method Blanks	x		
Storage Blanks	NA		
Trip Blanks			x
Field Blanks	NA		
Mass Spectrometer Tuning	x		
Calibration Response Factor	x		
Calibration Percent Relative Standard Deviation and Percent Difference			x
Internal Standards	x		
Surrogates	x		
Compound Identification - Volatile	x		
Tentatively Identified Compounds - Volatile	NA		
Matrix Spike/Matrix Spike Duplicate	NA		
Laboratory Control Sample/Laboratory Control Sample Duplicate	x		
Other Quality Control Data out of Specification	x		
Field Duplicate	NA		

Major= Major data quality issue identified resulting in rejection of data.

Minor= Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.

NA = Not applicable

Table 2
Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.



DATA USABILITY SUMMARY REPORT FOR PER-FLUORINATED ALKYL ACIDS

PROJECT: NYSDEC Town and Country Dry Cleaners

CLIENT: EA Engineering, Science, and Technology, Inc.

LABORATORY: Con-Test, A Pace Analytical Laboratory

SAMPLE DELIVERY GROUP: 23F0982

SAMPLE DATES: 06/06/2023

This sample delivery group consists of the following samples:

Client Sample ID	Laboratory Sample ID
828149-MW-3	23F0982-01
828149-DP-15	23F0982-02
828149-GEMW-2	23F0982-03
828149-DP-18	23F0982-04
828149-DP-20	23F0982-05
828149-DP-19	23F0982-06
828149-MW-19B	23F0982-07
828149-MW-21B	23F0982-08
828149-DP-21	23F0982-09
828149-FB-02	23F0982-10
828149-EB-01	23F0982-11

Performance criteria specified in the analytical method, USEPA Draft Method 1633, Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS, August 2021; as well as the New York Department of Environmental Conservation Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, January 2021, have been considered during validation of this data and its usability.

Table 1 provides a summary of major and minor data quality issues identified for this data set. All data are acceptable except those results which have been qualified with "R," rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

Per USEPA Region 2 Validation Guidance, "All data users should note two facts. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables even as a last resort. The second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error."

1. HOLDING TIME/SAMPLE HANDLING

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Proper sample handling and preservation also play a role in the chemical stability of analytes in the sample matrix. If samples are not collected and stored using proper containers and/or preservatives, data may not be valid.

The samples in this sample delivery group (SDG) were received by the laboratory within the proper temperature range. All holding time criteria were met.

2. BLANK CONTAMINATION

Quality assurance blanks include method, storage, trip, field, or rinse blanks. Blanks are prepared to identify any contamination, which may have been introduced into the samples during laboratory preparation and analysis or field activity. Method and storage blanks measure laboratory contamination. Trip blanks measure cross contamination during shipment. Field and rinse blanks measure cross contamination during field operations.

Method Blanks

Method blanks were prepared and analyzed in association with the samples in this SDG at the specified frequency. No problems were found for this criterion with the following exception. 6:2 FTS was positively identified in the method blank associated with all samples in this SDG. Results reported for the impacted analyte in the associated samples have been evaluated and qualified as appropriate per validation guidelines.

Calibration Blanks

No problems were found for this criterion with the following exceptions. The analytes listed in the table below were positively identified in the initial calibration blank (ICB) associated with all samples in this SDG. Results reported for the impacted analytes in the associated samples have been evaluated and qualified as appropriate per validation guidelines.

PFOA	PFD _o A	PFT _r DA
PFT _e DA	PFH _x S	PFD _o S
6:2 FTS	PFOSA	NMeFOSA
NEtFOSA	NMeFOSE	NEtFOSE
11Cl-PF3OUdS	5:3 FTCA	7:3 FTCA

Field Blanks

Samples 828149-EB-01 and 828149-FB-02 were submitted as equipment / field blanks in association with the samples in this SDG. No problems were found with this criterion.

3. CALIBRATION

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative results. The initial calibration curve demonstrates that the instrument is capable of giving acceptable performance at the beginning of an analytical sequence. The continuing calibration verifies that the instrument is continuing to provide satisfactory daily performance. Additionally, a continuing calibration is analyzed at the end of each 12-hour analytical sequence, denoted as a “closing” calibration verification and ascertains acceptable performance at the conclusion of the analytical sequence.

Percent Relative Standard Deviation and Percent Deviation

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate stability of a specific compound over the calibration range. Percent deviation (%D) compares the response factor of the continuing calibration with the mean response factor of the initial calibration. Therefore, %D is a measure of the instrument's daily performance.

An RSD value outside the initial calibration limit indicates the potential for quantitation errors. For this reason, all positive and non-detected results are qualified as estimated. Severe performance failures (RSD >90%) requires rejection of non-detected results. The following QC criteria have been applied for this project: The %RSD of initial calibration must be <20%.

The %D for all analytes in the continuing calibration must be <30% with the exception of the lowest level continuing calibration which must have all a %D for all analytes <50%. A value outside these limits indicates the potential for detection and quantitation errors. For these reasons, all positive results are qualified as estimated "J," and non-detects are qualified with "UJ."

All initial calibration and continuing calibration %RSD and %D values were within defined QC criteria for all target analytes.

4. ISOTOPE DILUTION STANDARDS / SURROGATES

All samples are spiked with isotope dilution or surrogate compounds prior to sample preparation and analyses to evaluate overall laboratory performance and efficiency of the analytical technique.

No problems were found for this criterion.

5. COMPOUND IDENTIFICATION

Per-fluorinated Compounds

The project target analyte compounds are identified on the LC/MS/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have ion spectra with primary and when available secondary characteristic ions present. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

All samples were evaluated at a Stage level 4.

The actual ratios of quantifier ion to qualifier ion or the laboratory's criteria were not provided by the laboratory for evaluation. In addition, signal to noise ratios for quantifier ions were not provided by the laboratory for evaluation. Therefore, these criteria were not assessed.

6. MATRIX SPIKE/MATRIX DUPLICATE

The matrix spike and matrix spike duplicate (MS/MSD) are generated to determine the precision and accuracy of the analytical procedure in a given sample matrix. A matrix duplicate sample analysis is performed to determine long-term precision of the analytical method in a given matrix. The relative percent difference (RPD) between the sample and its duplicate may be used to qualify data.

No sample was submitted for MS/MSD evaluation in association with this SDG.

7. LABORATORY CONTROL SAMPLE

The Laboratory Control Sample (LCS) is spiked with the same analytes at the same concentrations as the matrix spike. The LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

No problems were found for this criterion.

8. REPORTING

No problems were found for this criterion.

9. OTHER QUALITY CONTROL DATA OUT OF SPECIFICATION

None.

10. FIELD DUPLICATE

Field duplicates are two (or more) field samples collected at the same time in the same location. Each of the samples represents the same population and is carried through all steps of the sampling and analytical procedures in an identical manner. Field duplicate results are used to assess precision of the total method, including sampling, analysis, and site heterogeneity.

No samples were analyzed as a field duplicate pair in association with this SDG.

11. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Overall, the laboratory data generated met the project goals and quality control criteria, with the exceptions identified in this report and as summarized in Table 1.

Table 1
Review Elements Summary

	Were acceptance criteria met?		
	Yes	No	
Per-fluorinated Compounds		Major	Minor
Holding Time/Sample Handling	x		
Method Blanks / Calibration Blanks			x
Field Blanks	x		
Calibration Percent Relative Standard Deviation and Percent Difference	x		
Isotope Dilution Standards / Surrogates	x		
Compound Identification	x		
Matrix Spike/Matrix Duplicate	NA		
Laboratory Control Sample	x		
Other Quality Control Data out of Specification	x		
Field Duplicate	NA		

Major= Major data quality issue identified resulting in rejection of data.

Minor= Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.

NA = Not applicable

Table 2
Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
EMPC	The result is an estimated maximum potential concentration.

Table 3
PFAS Definitions Table

	CAS Number	Compound	Abbreviation(s)
1	151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid	NFDHA, PFECA B
2	113507-82-7	Perfluoro (2-ethoxyethane) sulfonic acid	PFEESA, PES
3	4151-50-2	N-ethylperfluoro-1-octanesulfonamide	NEtFOSA, NEtPFOSA
4	31506-32-8	N-methylperfluoro-1octanesulfonamide	NMeFOSA, NMePFOSA
5	377-73-1	Perfluoro-3-methoxypropanoic acid	PFMPA, PRMOPrA, PFECA F
6	375-73-5	Perfluorobutanesulfonic acid	PFBS
7	863090-89-5	Perfluoro-4-methoxybutanoic acid	PFMBA, PFMOBA, PFECA A
8	2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA
9	13252-13-6	Hexafluoropropylene Oxide Dimer Acid	HFPO-DA, Gen-X, HFPODA
10	2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA
11	375-22-4	Perfluorobutanoic acid	PFBA
12	335-67-1	Perfluorooctanoic acid	PFOA
13	2706-91-4	Perfluoropentanesulfonic acid	PFPeS
14	754-91-6	Perfluorooctanesulfonamide	FOSA, PFOSA
15	1763-23-1	Perfluorooctanesulfonic acid	PFOS
16	2706-90-3	Perfluoropentanoic acid	PFPeA
17	2058-94-8	Perfluoroundecanoic acid	PFUnA, PFUnDA
18	376-06-7	Perfluorotetradecanoic acid	PFTeA, PFTeDA
19	72629-94-8	Perfluorotridecanoic acid	PFTriA, PFTrDA
20	375-95-1	Perfluorononanoic acid	PFNA
21	79780-39-5	Perfluorododecanesulfonic acid	PFDoS
22	307-55-1	Perfluorododecanoic acid	PFDoA, PFDoDA
23	335-77-3	Perfluorodecanesulfonic acid	PFDS
24	335-76-2	Perfluorodecanoic acid	PFDA
25	375-92-8	Perfluoroheptanesulfonic Acid	PFHpS
26	307-24-4	Perfluorohexanoic acid	PFHxA
27	68259-12-1	Perfluorononanesulfonic acid	PFNS
28	375-85-9	Perfluoroheptanoic acid	PFHpA
29	355-46-4	Perfluorohexanesulfonic acid	PFHxS
30	763051-92-9	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11CL-PF3Ouds, F-53 Minor
31	27619-97-2	6:2-Fluorotelomersulfonic acid	6:2 FTS
32	812-70-4	7:3 Fluorotelomer carboxylic acid	7:3 FTCA
33	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS
34	39108-34-4	8:2-Fluotelomersulfonic acid	8:2 FTS
35	914637-49-3	5:3 Fluorotelomer carboxylic acid	5:3 FTCA
36	1691-99-2	2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	NEtPFOSAE, NEtFOSE
37	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid	DONA, ADONA
38	757124-72-4	4:2-Fluorotelomersulfonic acid	4:2 FTS

	CAS Number	Compound	Abbreviation(s)
39	24448-09-7	2-(N-methylperfluoro-1-octanesulfonamido) ethanol	NMePFOSAE, NMeFOSE
40	356-02-5	3-Perfluoropropylpropanoic acid	3:3 FTCA

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Appendix D

Trend Evaluation Graphs

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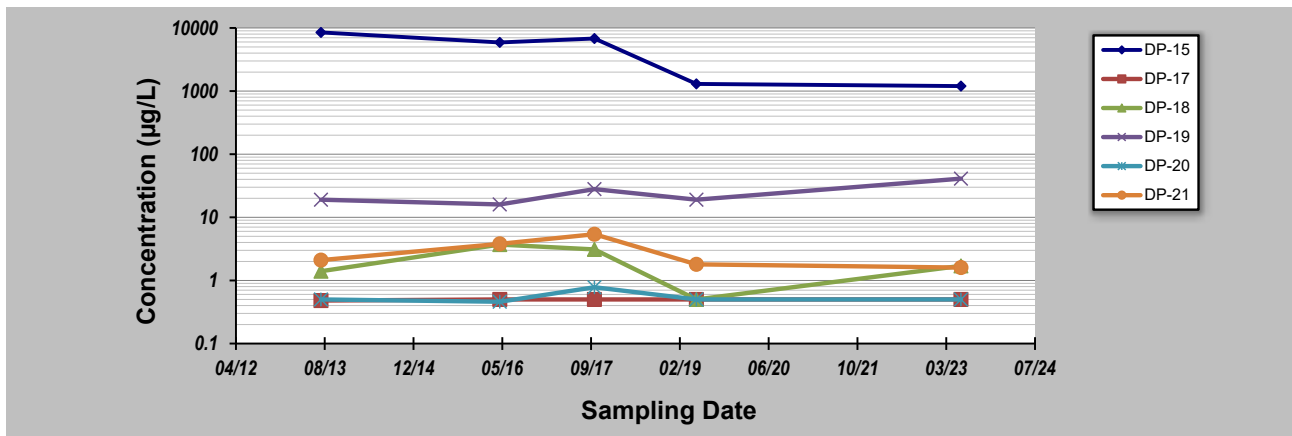
GSI MANN-KENDALL TOOLKIT

for Constituent Trend Analysis

Evaluation Date: **September-23**
 Facility Name: **Town and Country Cleaners Site**
 Conducted By: **EA Engineering, Science, and Technology**

Job ID: **1602534.0020**
 Constituent: **PCE**
 Concentration Units: **µg/L**

Sampling Point ID:		DP-15	DP-17	DP-18	DP-19	DP-20	DP-21	
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	24-Jul-13	8500	0.48	1.4	19	0.5	2.1	
2	26-Apr-16	5900	0.5	3.7	16	0.46	3.8	
3	11-Oct-17	6800	0.5	3.1	28	0.78	5.4	
4	8-May-19	1300	0.5	0.5	19	0.5	1.8	
5	6-Jun-23	1200	0.5	1.7	41	0.5	1.6	
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Coefficient of Variation:		0.70	0.02	0.63	0.42	0.24	0.55	
Mann-Kendall Statistic (S):		-8	4	-2	5	1	-4	
Confidence Factor:		95.8%	75.8%	59.2%	82.1%	50.0%	75.8%	
Concentration Trend:		Decreasing	No Trend	Stable	No Trend	No Trend	Stable	



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

DISCLAIMER: The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

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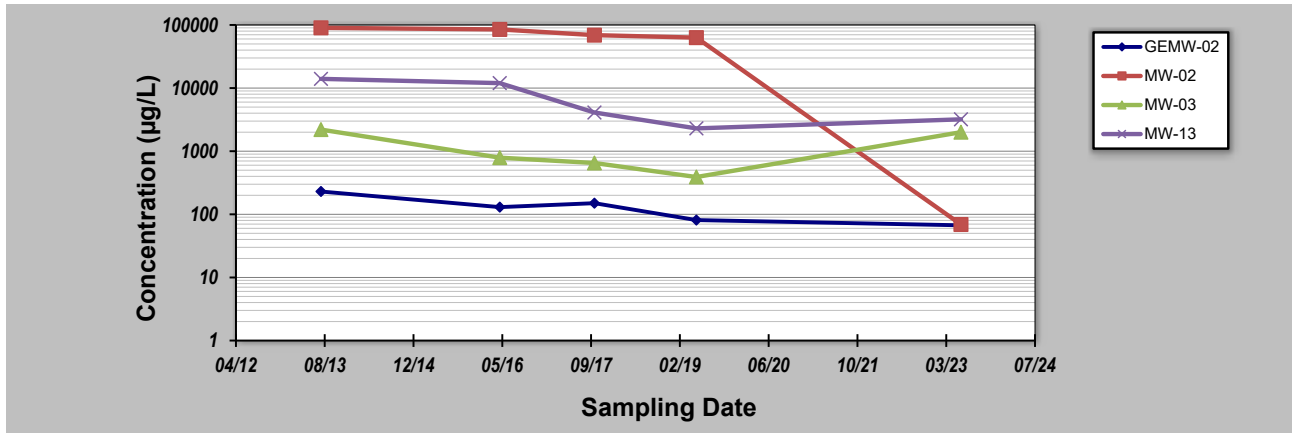
GSI MANN-KENDALL TOOLKIT

for Constituent Trend Analysis

Evaluation Date: **September-23**
 Facility Name: **Town and Country Cleaners Site**
 Conducted By: **EA Engineering, Science, and Technology**

Job ID: **1602534.0020**
 Constituent: **PCE**
 Concentration Units: **µg/L**

Sampling Point ID:		GEMW-02	MW-02	MW-03	MW-13			
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	24-Jul-13	230	90000	2200	14000			
2	26-Apr-16	130	85000	790	12000			
3	11-Oct-17	150	69000	650	4100			
4	8-May-19	81	63000	390	2300			
5	6-Jun-23	67	69	2000	3200			
6								
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17								
18								
19								
20								
Coefficient of Variation:		0.49	0.59	0.69	0.77			
Mann-Kendall Statistic (S):		-8	-10	-4	-8			
Confidence Factor:		95.8%	99.2%	75.8%	95.8%			
Concentration Trend:		Decreasing	Decreasing	Stable	Decreasing			



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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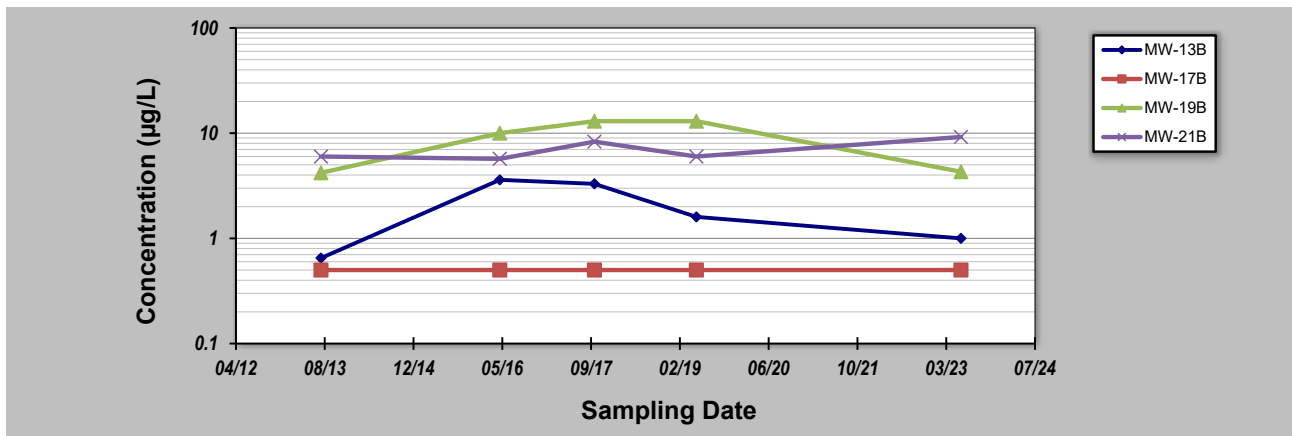
GSI MANN-KENDALL TOOLKIT

for Constituent Trend Analysis

Evaluation Date: **September-23**
 Facility Name: **Town and Country Cleaners Site**
 Conducted By: **EA Engineering, Science, and Technology**

Job ID: **1602534.0020**
 Constituent: **PCE**
 Concentration Units: **µg/L**

Sampling Point ID:		MW-13B	MW-17B	MW-19B	MW-21B			
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	24-Jul-13	0.65	0.5	4.2	6			
2	26-Apr-16	3.6	0.5	10	5.7			
3	11-Oct-17	3.3	0.5	13	8.3			
4	8-May-19	1.6	0.5	13	6			
5	6-Jun-23	1	0.5	4.3	9.2			
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Coefficient of Variation:		0.66	0.00	0.50	0.23			
Mann-Kendall Statistic (S):		-2	0	3	5			
Confidence Factor:		59.2%	40.8%	67.5%	82.1%			
Concentration Trend:		Stable	Stable	No Trend	No Trend			



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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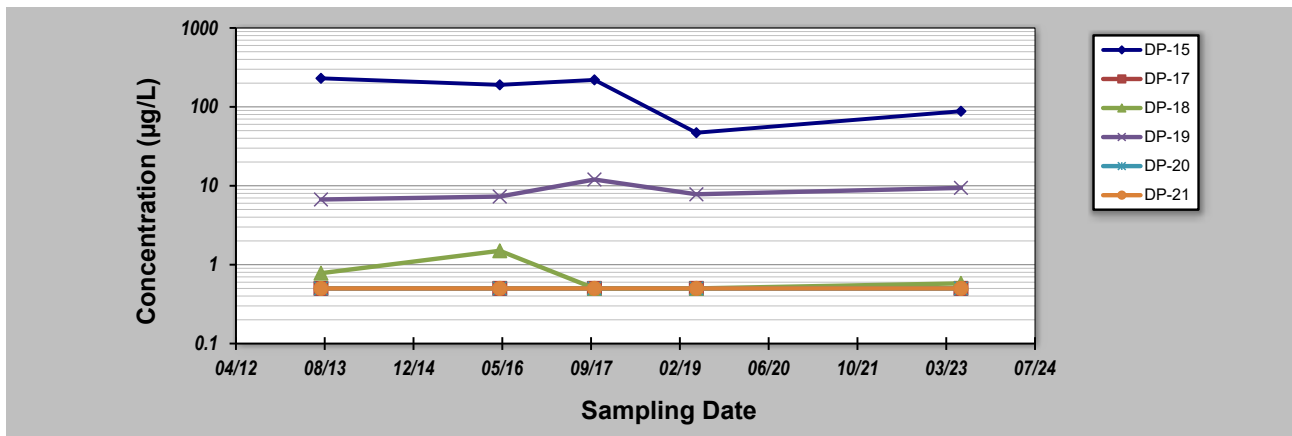
GSI MANN-KENDALL TOOLKIT

for Constituent Trend Analysis

Evaluation Date: **September-23**
 Facility Name: **Town and Country Cleaners Site**
 Conducted By: **EA Engineering, Science, and Technology**

Job ID: **1602534.0020**
 Constituent: **cis-1,2-DCE**
 Concentration Units: **µg/L**

Sampling Point ID:		DP-15	DP-17	DP-18	DP-19	DP-20	DP-21	
Sampling Event	Sampling Date	CIS-1,2-DCE CONCENTRATION (µg/L)						
1	24-Jul-13	230	0.5	0.78	6.7	0.5	0.5	
2	26-Apr-16	190	0.5	1.5	7.3	0.5	0.5	
3	11-Oct-17	220	0.5	0.5	12	0.5	0.5	
4	8-May-19	47	0.5	0.5	7.8	0.5	0.5	
5	6-Jun-23	88	0.5	0.58	9.4	0.5	0.5	
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Coefficient of Variation:		0.53	0.00	0.55	0.25	0.00	0.00	
Mann-Kendall Statistic (S):		-6	0	-3	6	0	0	
Confidence Factor:		88.3%	40.8%	67.5%	88.3%	40.8%	40.8%	
Concentration Trend:		Stable	Stable	Stable	No Trend	Stable	Stable	



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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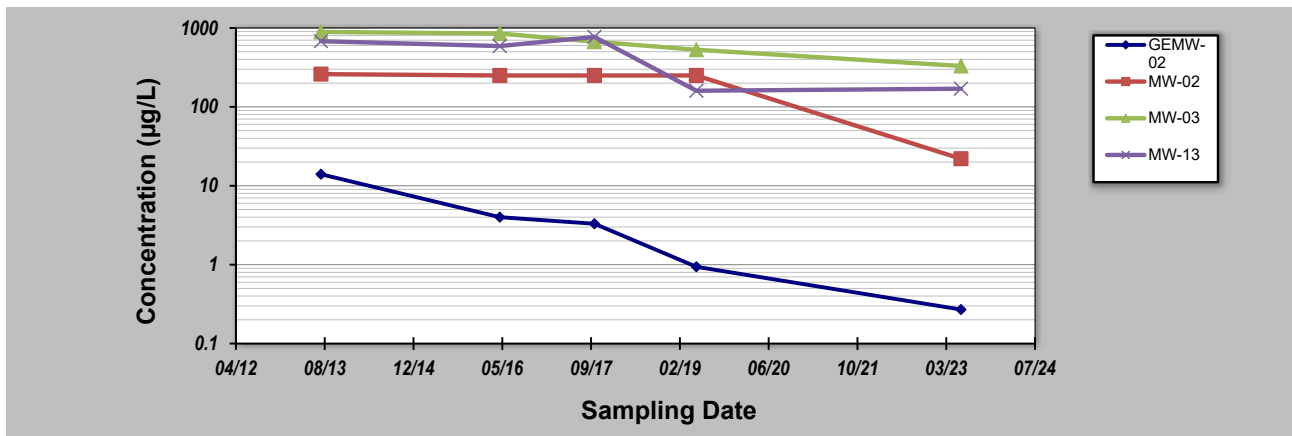
GSI MANN-KENDALL TOOLKIT

for Constituent Trend Analysis

Evaluation Date: **September-23**
 Facility Name: **Town and Country Cleaners Site**
 Conducted By: **EA Engineering, Science, and Technology**

Job ID: **1602534.0020**
 Constituent: **cis-1,2-DCE**
 Concentration Units: **µg/L**

Sampling Point ID:		GEMW-02	MW-02	MW-03	MW-13			
Sampling Event	Sampling Date	CIS-1,2-DCE CONCENTRATION (µg/L)						
1	24-Jul-13	14	260	890	680			
2	26-Apr-16	4	250	850	590			
3	11-Oct-17	3.3	250	670	770			
4	8-May-19	0.94	250	530	160			
5	6-Jun-23	0.27	22	330	170			
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Coefficient of Variation:		1.23	0.50	0.35	0.61			
Mann-Kendall Statistic (S):		-10	-7	-10	-4			
Confidence Factor:		99.2%	92.1%	99.2%	75.8%			
Concentration Trend:		Decreasing	Prob. Decreasing	Decreasing	Stable			



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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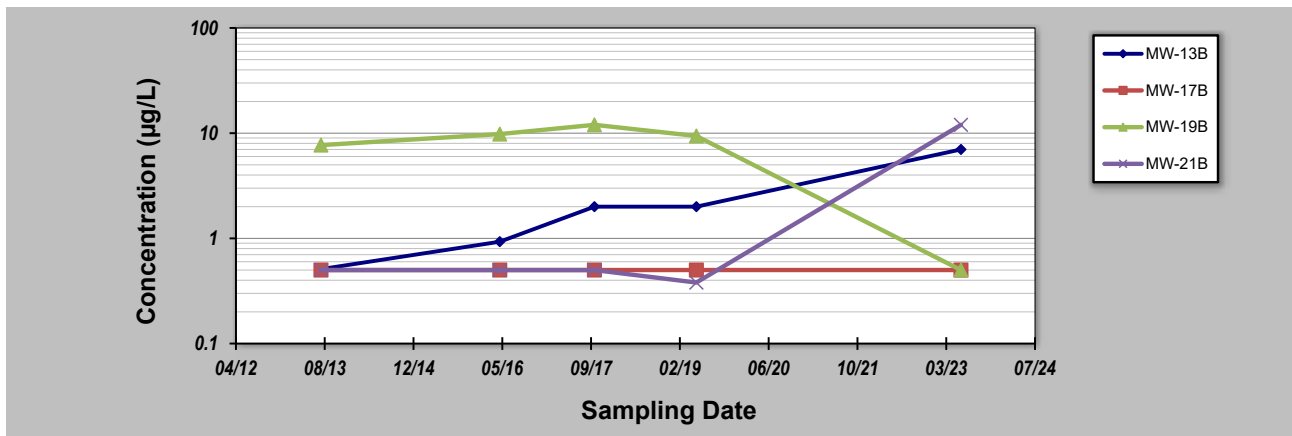
GSI MANN-KENDALL TOOLKIT

for Constituent Trend Analysis

Evaluation Date: **September-23**
 Facility Name: **Town and Country Cleaners Site**
 Conducted By: **EA Engineering, Science, and Technology**

Job ID: **1602534.0020**
 Constituent: **cis-1,2-DCE**
 Concentration Units: **µg/L**

Sampling Point ID:		MW-13B	MW-17B	MW-19B	MW-21B			
Sampling Event	Sampling Date	CIS-1,2-DCE CONCENTRATION (µg/L)						
1	24-Jul-13	0.51	0.5	7.7	0.5			
2	26-Apr-16	0.93	0.5	9.8	0.5			
3	11-Oct-17	2	0.5	12	0.5			
4	8-May-19	2	0.5	9.4	0.38			
5	6-Jun-23	7	0.5	0.5	12.0			
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Coefficient of Variation:		1.05	0.00	0.56	1.86			
Mann-Kendall Statistic (S):		9	0	-2	1			
Confidence Factor:		97.5%	40.8%	59.2%	50.0%			
Concentration Trend:		Increasing	Stable	Stable	No Trend			



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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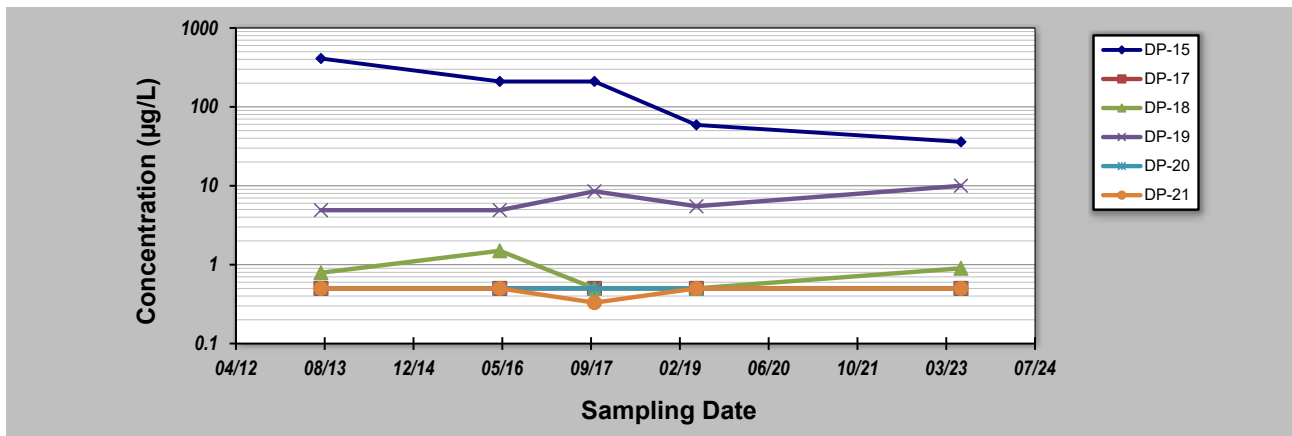
GSI MANN-KENDALL TOOLKIT

for Constituent Trend Analysis

Evaluation Date: **September-23**
 Facility Name: **Town and Country Cleaners Site**
 Conducted By: **EA Engineering, Science, and Technology**

Job ID: **1602534.0020**
 Constituent: **TCE**
 Concentration Units: **µg/L**

Sampling Point ID:		DP-15	DP-17	DP-18	DP-19	DP-20	DP-21	
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	24-Jul-13	410	0.5	0.79	4.9	0.5	0.5	
2	26-Apr-16	210	0.5	1.5	4.9	0.5	0.5	
3	11-Oct-17	210	0.5	0.5	8.5	0.5	0.33	
4	8-May-19	59	0.5	0.5	5.5	0.5	0.5	
5	6-Jun-23	36	0.5	0.9	10.0	0.5	0.5	
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Coefficient of Variation:		0.81	0.00	0.49	0.35	0.00	0.16	
Mann-Kendall Statistic (S):		-9	0	-1	7	0	0	
Confidence Factor:		97.5%	40.8%	50.0%	92.1%	40.8%	40.8%	
Concentration Trend:		Decreasing	Stable	Stable	Prob. Increasing	Stable	Stable	



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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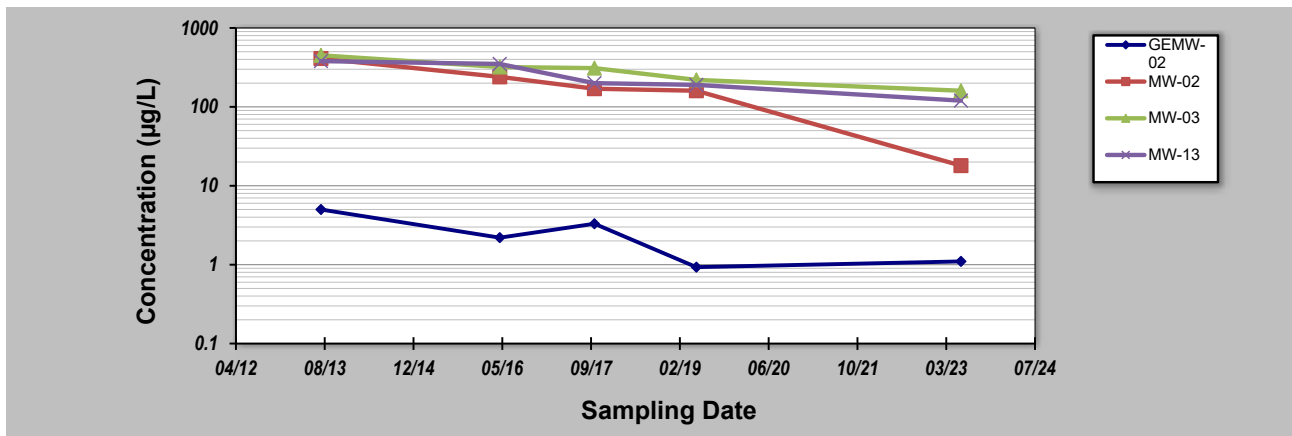
GSI MANN-KENDALL TOOLKIT

for Constituent Trend Analysis

Evaluation Date: **September-23**
 Facility Name: **Town and Country Cleaners Site**
 Conducted By: **EA Engineering, Science, and Technology**

Job ID: **1602534.0020**
 Constituent: **TCE**
 Concentration Units: **µg/L**

Sampling Point ID:		GEMW-02	MW-02	MW-03	MW-13			
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	24-Jul-13	5	410	450	380			
2	26-Apr-16	2.2	240	320	350			
3	11-Oct-17	3.3	170	310	200			
4	8-May-19	0.93	160	220	190			
5	6-Jun-23	1.1	18	160	120			
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Coefficient of Variation:		0.67	0.71	0.38	0.45			
Mann-Kendall Statistic (S):		-6	-10	-10	-10			
Confidence Factor:		88.3%	99.2%	99.2%	99.2%			
Concentration Trend:		Stable	Decreasing	Decreasing	Decreasing			



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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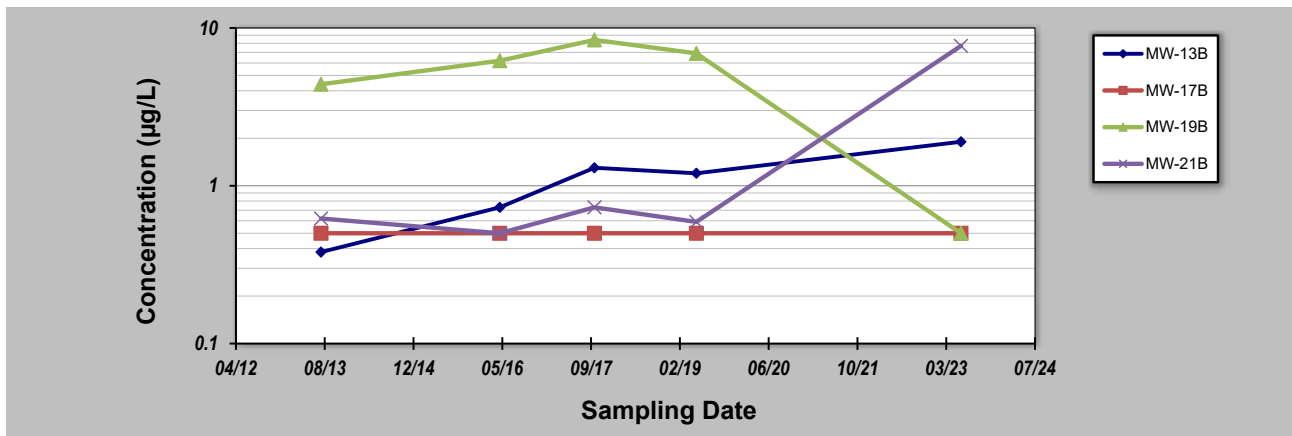
GSI MANN-KENDALL TOOLKIT

for Constituent Trend Analysis

Evaluation Date: **September-23**
 Facility Name: **Town and Country Cleaners Site**
 Conducted By: **EA Engineering, Science, and Technology**

Job ID: **1602534.0020**
 Constituent: **TCE**
 Concentration Units: **µg/L**

Sampling Point ID:		MW-13B	MW-17B	MW-19B	MW-21B			
Sampling Event	Sampling Date	TCE CONCENTRATION (µg/L)						
1	24-Jul-13	0.38	0.5	4.4	0.62			
2	26-Apr-16	0.73	0.5	6.2	0.5			
3	11-Oct-17	1.3	0.5	8.4	0.73			
4	8-May-19	1.2	0.5	6.9	0.59			
5	6-Jun-23	1.9	0.5	0.5	7.7			
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Coefficient of Variation:		0.53	0.00	0.57	1.56			
Mann-Kendall Statistic (S):		8	0	0	4			
Confidence Factor:		95.8%	40.8%	40.8%	75.8%			
Concentration Trend:		Increasing	Stable	Stable	No Trend			



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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